

A Work Project, presented as part of the requirements for the Award of a Master's degree  
in Finance from the Nova School of Business and Economics

**Private Equity Challenge - Acquisition of Vetropack**

Tomás Borges Costa Coelho Nunes

Work project carried out under the supervision of:

Prof. Luís Mota Duarte  
Fábio Santos

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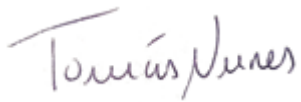
## Abstract

This Investment Committee Paper consists of a proposal for a leveraged buyout of Vetropack Holding AG, a swiss-based glass packaging manufacturer for the food and drinks sector, with domestic leadership and large international exposure in Central Europe. Through analysis of the market and identification of growth opportunities in Italy, Eastern Europe, and in the Premium Drinks sector, the group as developed a value creation strategy focused on horizontal acquisitions, and vertical integration and expansion. The proposed strategy and the optimal capital structure defined allow for an IRR of 25.9% and a Money Multiple of 4.9x over the 7-year holding period.

**Keywords:** Glass Packaging, Horizontal Acquisitions, Vertical Integration and Expansion, Vetropack

## Statutory Declaration

I hereby declare that this master thesis is our own and autonomous work. All sources and aids used have been indicated as such. All used information are publicly available and/or information made available directly by the company and third –party providers. Full bibliographic details are given in the footnotes which also contain internet sources. This work has not been submitted to any other examination authority.



Tomás Borges Costa Coelho Nunes

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# Content structure



- 1 Vetropack - Collective Investment Overview
  - 2 Historical Financials
  - 3 Market Environment
  - 4 Appendix
  - 5 Individual Reflection
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# Vetropack is an exceptional investment opportunity that yields a MM of 4.9x at an IRR of 25.9% over a 7-year holding period

## Executive Summary

|                  |   |
|------------------|---|
| Company          | <ul style="list-style-type: none"> <li>▪ <b>Vetropack Group is a public, independent glass packaging manufacturer in Switzerland owned by family Cornaz</b> <ul style="list-style-type: none"> <li>– The company is headquartered in Bülach/Switzerland with a strong presence in Central and Eastern European countries including Austria, Italy, Slovakia, Croatia, Czech Republic, Moldova and Ukraine; in total Vetropack employs ~3,400 FTE</li> <li>– With its comprehensive product portfolio, Vetropack serves both the high-volume market for beer and wine bottles and food products, as well as premium segments with customized spirits, craft beer and wine bottles; specialty glass distribution &lt;2% of sales</li> <li>– Majority shareholder of the company is Cornaz Holding AG (79.32 %), which is controlled by the founding Cornaz family</li> <li>– Vetropack reached revenue of CHF 728m in 2019A with EBITDA of CHF 165m (~23% margin); 2020E sales are expected to decline by ~10% due to Covid-19, but due to the essential nature of glass packaging and the vaccination start, a quick normalization to pre-crisis levels is anticipated</li> </ul> </li> </ul>  |
| Deal rationale   | <ul style="list-style-type: none"> <li>▪ <b>Why is this an interesting opportunity?</b> <ul style="list-style-type: none"> <li>– Market leader for glass packaging products in its home markets, e.g. Austria ~66%, Croatia ~65%, Moldova ~60%, Ukraine ~36% share</li> <li>– High EBITDA margins (~20-24%), strong cash conversion (~26%, 3-year average) and a leverageable balance sheet (net debt of ~CHF 22m)</li> <li>– Growing underlying Eastern European market forecast grow with a CAGR of 3.5% until 2025 driven by premiumization and sustainability trends</li> <li>– Significant barriers to entry due to the high transport weight of glass (transport only economical within a radius of 300km around the plant)</li> <li>– Entrenched relationships with blue-chip customers mirrored by strong, long-term customer base (e.g. Coca Cola, Nestlé and ABInBev)</li> </ul> </li> </ul>  |
| Value creation   | <ul style="list-style-type: none"> <li>▪ <b>How will we create value for Vetropack?</b> <ul style="list-style-type: none"> <li>– Expansion of Vetropacks' geographic reach to Western European and Scandinavian countries through targeted add-on acquisitions, i.e. Steklarna and Vetreria Etrusca; the objective is to serve premium end markets in high-income countries</li> <li>– In connection with the horizontal add-on acquisitions, a realignment of the product mix is being pursued with the aim of raising the share of higher-margin premium products and tapping high-growth segments such as for example gin (CAGR 20-25: 9.4%)</li> <li>– Trigger operational improvements through 1. continuous reduction of main raw material cost drivers in all plants by increasing cullet use (partly enabled by vertical integration of Eurovetro), 2. NWC optimization through dedicated working capital management measures aimed at reducing DIO, 3. implementation of Industry 4.0 process automation</li> <li>– Non-operational measures including 1. a reversion CAPEX spending towards industry benchmark, elevation of asset utilization levels and tactical divestures (sale of non-operating real estate and soon to be discontinued plant facilities in Trezzano, Italy (end of FY21)</li> </ul> </li> </ul> |
| Exit and returns | <ul style="list-style-type: none"> <li>– Valued at 7.9x EV/EBITDA at entry and exit, the investment yields an IRR of 25.9% and a 4.9x MM for the fund over the 7-year holding period</li> <li>– Management will reinvest CHF 3.6m (3.87 envy), yielding an IRR of 57.5% and a 24.1x MM, which includes a 4-layered incentive package based on MM offered to management with possible proceeds of ~CHF 44.4m</li> </ul>  |

# Since its foundation in 1911, Vetropack has successfully acquired a broad portfolio of glass manufacturing companies in Eastern Europe

## Company overview

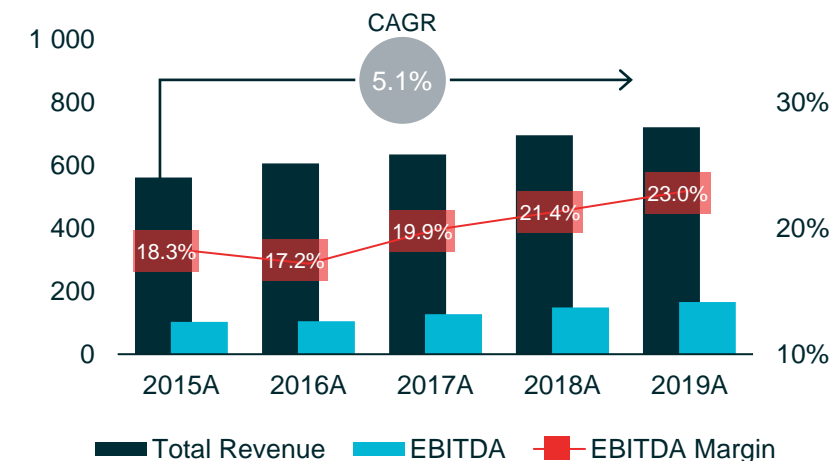
### Company snapshot

- Swiss-based Vetropack AG (SWX:VETN) headquartered in Bülach, CH was founded in 1969
- The family-managed company is a leading European glass bottle provider to the Food and Beverage industry
- With a workforce of 3,576 the company produced over 5 billion units of glass containers in 2019
- Vetropack offers glass packaging solutions from consumer grade beer bottles to custom designed glass containers with unique properties

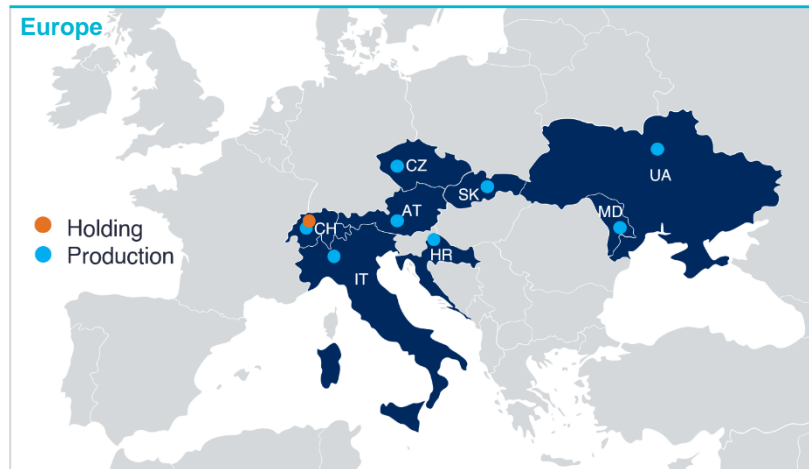
### Product portfolio<sup>1</sup>



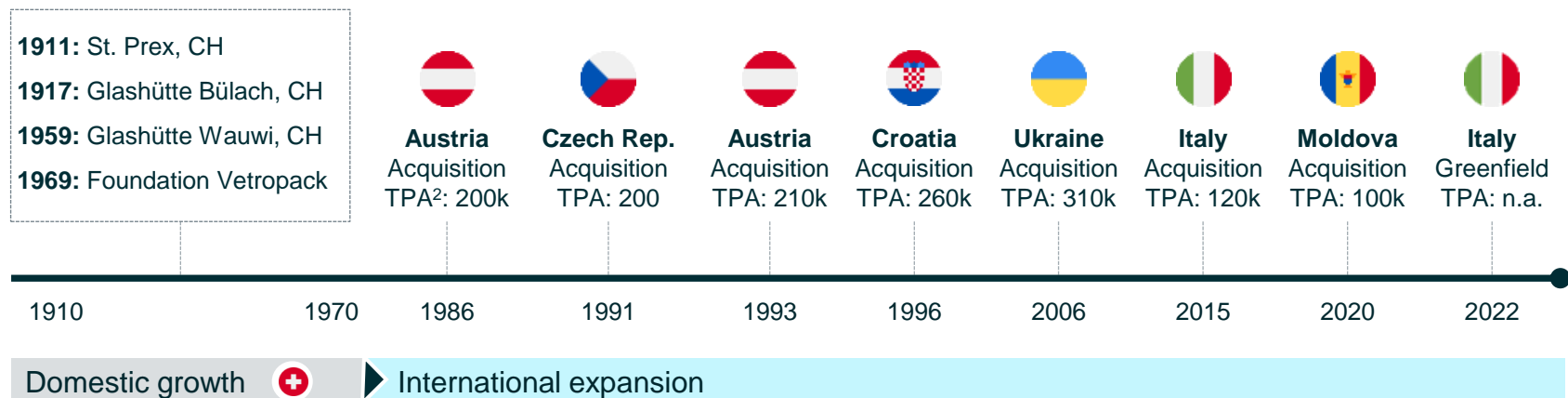
### Historical financial development



### Geographic presence



### From domestic dominance to European leadership



Source: Vetropack annual reports

1) As percentage of sales 2) TPA = Tons per annum

# Vetropack is a listed and family-managed group with management based in Switzerland – The entire management team has a high degree of industry expertise

## Management team and Employees

### Management team



#### Johann Reiter, CEO

Dipl. Industrial & Mechanical Engineer, Kapfenberg, AT

- Joined Vetropack in 2010
- Well-known CEO with comprehensive industry experience
- Previously Vetropack country head of Switzerland and Austria



#### David Zak, CFO

BSc. Business Admin., Boston University, USA | Joined Vetropack in 2002 | Previously CFO of Studer Professional Audio AG and other finance & management positions at ABB



#### Evan Williams, GM Marketing

Bsc. Business Admin. and applied psychology, University of Aston, UK | Joined Vetropack in 2019 | Previously director global key account and director EU beer segment at O-I



#### Günter Lubitz, GM Production

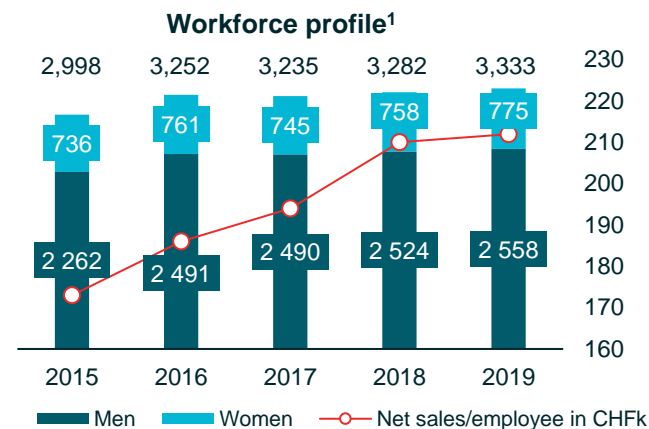
Dipl. Engineer, Glass and Ceramics Engineer | Joined Vetropack in 2003 | Previously technical and works manager at various glass packaging companies



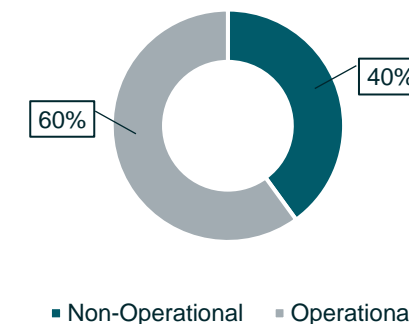
#### Nuno Cunha, GM HR & Staff Development

Sociology degree, Universidade Nova de Lisboa, Portugal | Joined Vetropack in 2018 | Previously HR roles at GM, Valspar Corporation and Cabot Corporation

### Employees



#### Non-operational vs. operational workers



- Vetropack employed a total workforce of 3,576 FTE in 2019
- High share of permanent contracts (99% in FY19) attracts skilled workforce and fosters employee loyalty
- Net sales per employee improved by 22.5% from CHF 174k in FY15 to CHF 212k in FY19, undermining the success of continuous topline and cost-base improvement
- All employees are entitled to participate in in-house professional development programs (e.g. staff training center in Austria)
- Employee turnover rate by gender in 2019:
  - **Male:** 11.1%
  - **Female:** 8.9%

# Vetropack's key to success is 'Leadership in Quality' and their business model aims to create lasting value to its stakeholders

## Business model

### Resources used

#### Customers and suppliers

- Broad customer base and multi-supplier strategy

#### Employees

- Highly skilled workforce
- Human talent training center in Austria

#### Finances

- Self-financed with strong focus on cash flow generation and profitability

#### Innovation and IP

- Customers and suppliers engaged in product development
- Systematic management of patents

#### Production "One brand, one quality"

- Lean production principles and uniform quality checks

### Core processes

#### Circular Economy

- Glass is infinitely recyclable
- Fact: New glass can be produced from up to 100% recycled glass
- Vetropack launched collection initiatives to maximize collection rates

#### Efficient production

- Continuous investments in flexible and efficient production lines

#### Demand-driven planning

- Maximize capacity utilization by extensive prediction of demand forecasts

#### Supplier relations like partnerships

- High investments in relationships to guarantee supplies and raw materials availability
- Customers place great value on reliable, on-time deliveries

#### Needs-based products

- Close collaboration with designers and clients allows for complex product designs

#### Service plus+

Design & analysis, bottling, conditioning and closure technology, glass finishing and labelling.



### Value generated

#### Products

Over 2,500 different kinds of glass packaging produced innovative, cost-effective and with highest standards

#### Shareholders

Profitability and sustainable growth while continuously investing in production facilities and recycling systems. Additional annual payments of dividends.

#### Partners along the value chain

Strengthening relationships with strategic important suppliers with long-term agreements and contracts lay the foundation for certainty in forecasting and planning

#### Employees

Much of Vetropack's success is driven by its employees – in reverse the company offers attractive jobs and professional development opportunities

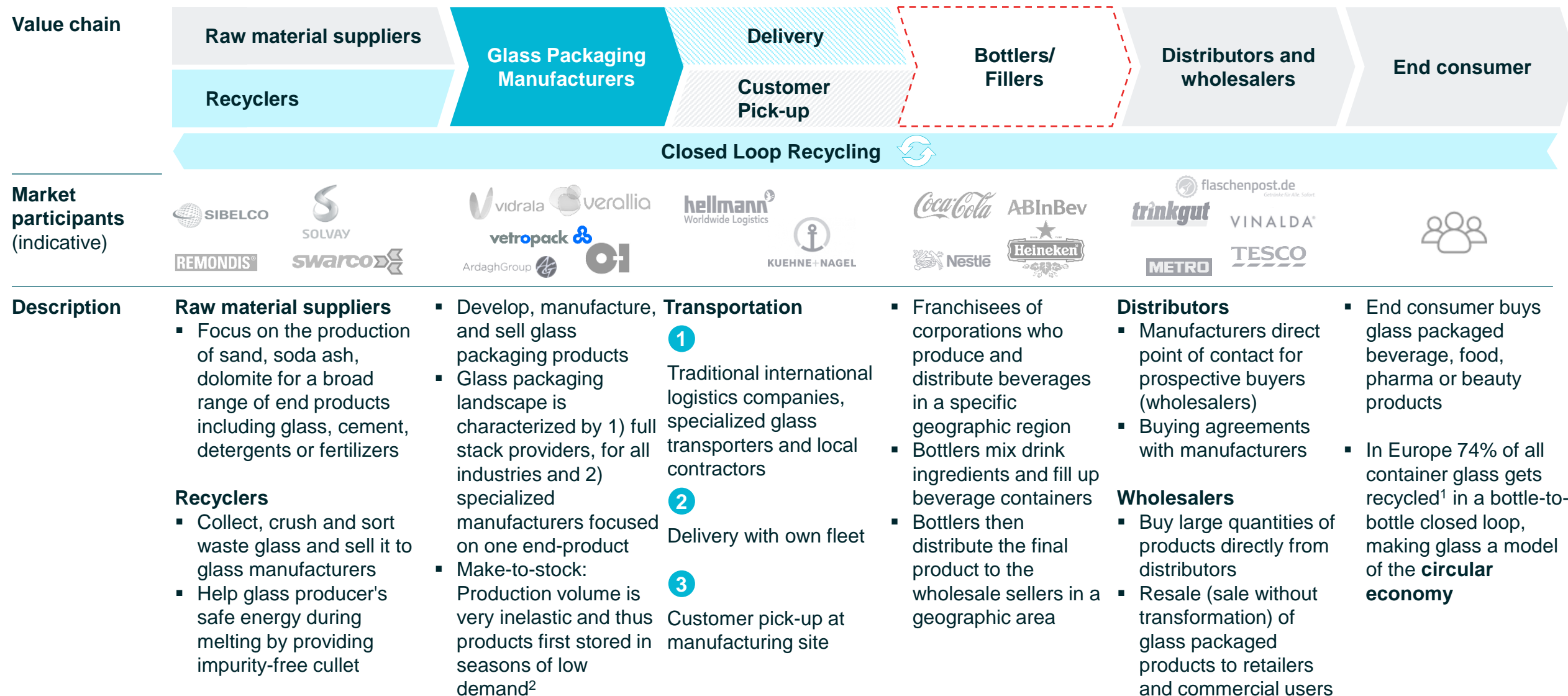
#### Environment

Investments in state-of-the-art facilities result in lower energy consumption and reduced CO2 emissions



# Vetropack is positioned as a glass packaging manufacturer focused on product commercialization

## External industry value chain positioning



Source: 1) FEVE, Vetropack annual reports

2) "New Hierarchical Production Planning Design for Glass Container Industry", February 2006

Vetropack core business

Adjacent downstream business

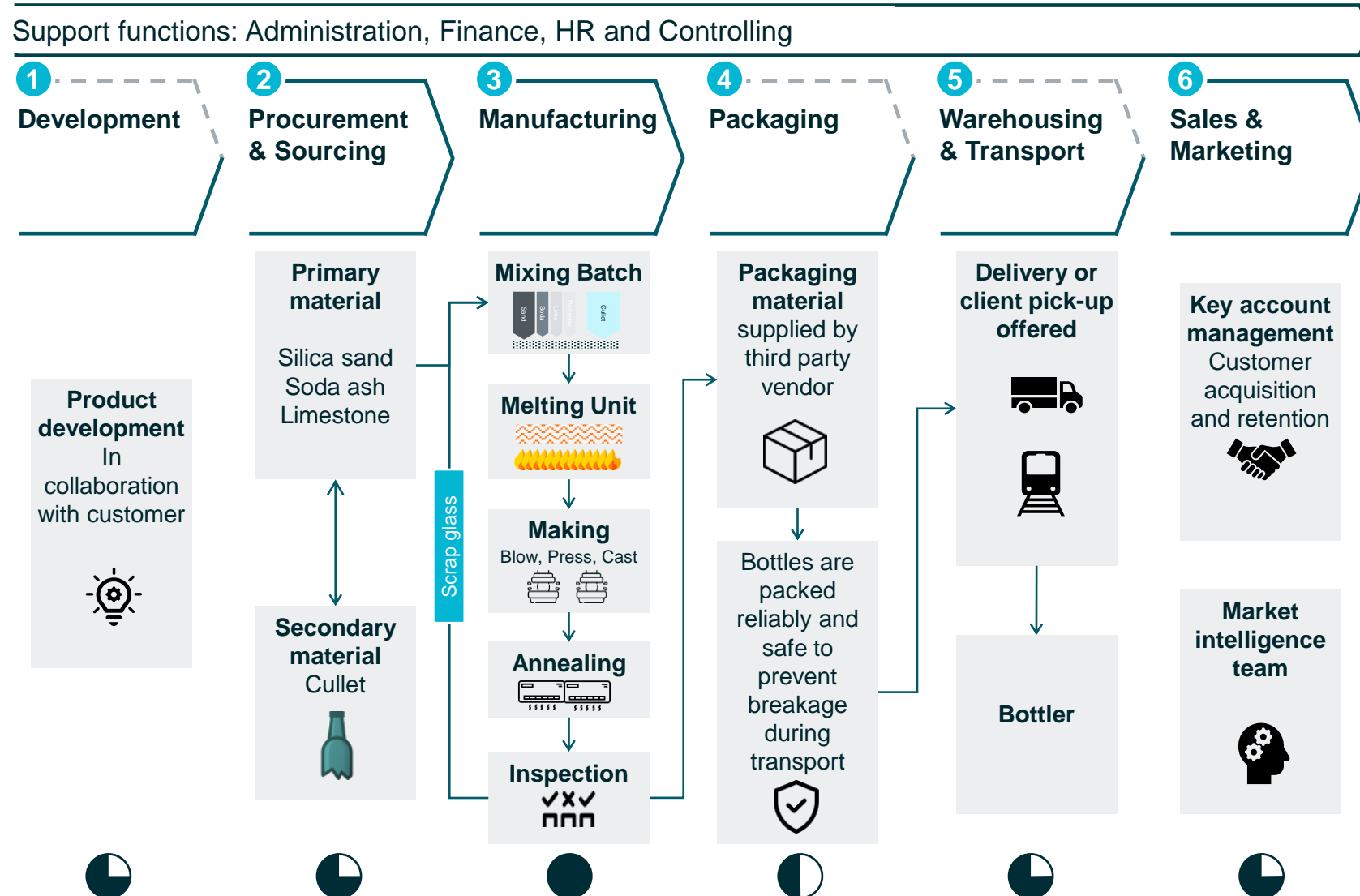
Vetropack's direct customers

Vetropack's industry value chain



# Vetropack's value chain is geared towards the long-term and a customer specific product development – core competencies in development and manufacturing

## Vetropack's internal value chain



## Value chain analysis

- 1 Development**  
Product ideas are developed customer specific. Short communication channels ensure close collaboration between production teams and customers
- 2 Procurement & Sourcing**  
Dedicated procurement teams maintain close ties with local suppliers of raw materials and cullet ensuring highest quality at a reasonable price level
- 3 Manufacturing**  
Standardized production processes at all 7 European plants ensure key customers can rely on consistent high-quality products at every location
- 4 Packaging**  
Packaging is produced externally. Packaging is generally performed at production site in the respective customer format
- 5 Warehousing & Transport**  
Vetropack offers delivery (with own fleet or third-party logistics provider) or client pick-up at the manufacturing site
- 6 Sales & Marketing**
  - Sales team responsible for key accounts, tender preparation and contract negotiations
  - Market intelligence responsible for market screening and competitive analyses

# Vetropack's USP is based on its multi-supplier strategy business model, the ability to innovate, longstanding customer relationships and a strong management team

## Unique selling propositions

### Innovation and digitalisation

- The open innovation strategy allows for the all-encompassing development of the container glass production process
- A major USP is the in-house consultancy *Vetroconsult*, which optimizes process and production on a continuous basis
- Vetropack exploits opportunities for digitalization and automation continuously in all steps of the value chain
- Vetropack is a global leader in innovation and famous for light-weight glass and the VIP Glass Division for extraordinary orders

### Customer and supplier relationships

- Long-term collaboration agreements with customers and suppliers are essential to ensure partnerships are structured as efficient as needed
- Vetropack defined specific relationship KPI's, such as active customers/suppliers per category or number of long-term contracts in order to measure relationship progress
- Focus on product quality and security is an essential factor that is considered for each developed product to ensure that customers' health and product expectations are fulfilled



### Multi Supplier Strategy (MSS)

- The MSS reduces the risk of interruptions to glass packaging production operations and reliable product deliveries
- Head of Procurement and GM Technology & Production work closely together to improve and develop the group's supplier strategy on continuous basis
- Code of conduct for suppliers defines systematic approach for Vetropacks' MSS when searching for, assessing and validating potential new suppliers

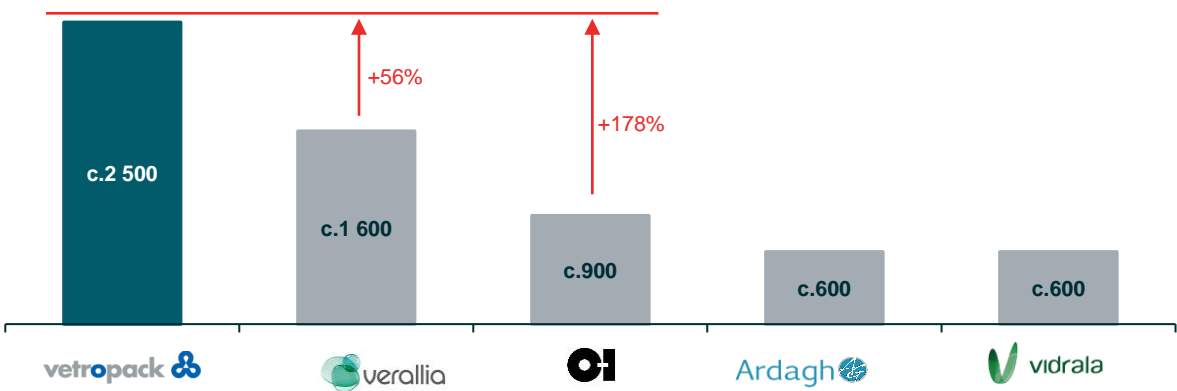
### Experienced management team and staff

- The sustainable growth and market success are underpinned by high qualified field staff and the experienced management team
- Provision of targeted continuing professional development and systematic fostering of talent ensure to remain innovative and competitive
- A management and employee training center based in Austria was opened in 2016, to ensure practical on-the-job training

# Differentiated positioning with a compelling value proposition ready to serve a diversified customer base on a global and regional scale

## Customers

### Largest product portfolio in Europe<sup>1</sup>



### High customer centricity

- Excellent customer loyalty owing to superior customer service
- Diversified customer base (international blue-chip and local top-tier)
- Customers are early involved in the design and manufacturing process in order to guarantee full satisfaction and long-term partnerships



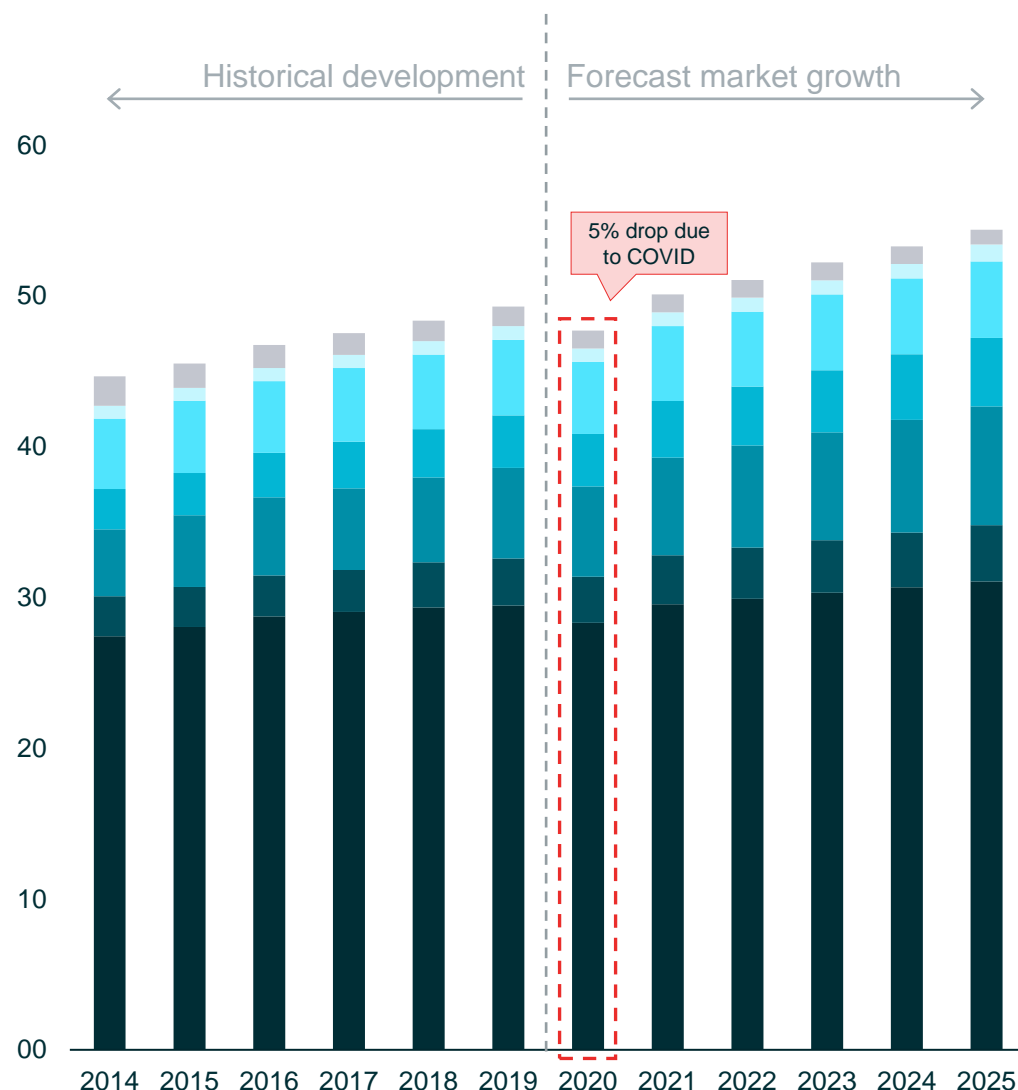
### Diversified customer base<sup>2</sup>

|                         | Customers                         | Concentration   |
|-------------------------|-----------------------------------|-----------------|
| Still wine              | Mostly regional                   | <div>Low</div>  |
| Sparkling wine          | Mostly regional                   |                 |
| Food                    | Global + regional                 |                 |
| Non-alcoholic beverages | Significant share of global       |                 |
| Spirits                 | Global + regional                 |                 |
| Beer                    | Large global and regional players | <div>High</div> |

Value-based pricing enabled by diversified customer mix

# The identified glass packaging market in Europe is expected to grow at c. 2.0% p.a. until 2025 – Eastern Europe with significantly higher growth rates

Addressable market development by region [EUR bn]



|                          | CAGR<br>2014-2020 | CAGR<br>2020-2025 |
|--------------------------|-------------------|-------------------|
| Total                    | 2.0%              | 2.2%              |
| Switzerland <sup>2</sup> | -7.1%             | -3.5%             |
| Austria                  | 1.4%              | 4.4%              |
| Italy                    | 1.3%              | 1.0%              |
| Czech Republic           | 5.4%              | 4.5%              |
| Poland                   | 6.1%              | 4.7%              |
| Rest Eastern EU          | 3.2%              | 3.4               |
| Rest Western EU          | 1.4%              | 1.5%              |

## Analysis

The European glass packaging market is valued at EUR 50.2bn and predicted to grow at c. 2.0% p.a.

Growth in Vetropack core markets such as Italy, Poland and Czech Republic is even stronger

Western Europe market growth rates to be stable, growth rates in Eastern Europe expected to rise

### Main growth drivers:

- Changing consumer behaviour towards premium products
- Awareness for sustainability among Europeans drives demand for recyclable products
- Rising demand for customized small batch series

### Covid-19 Impact

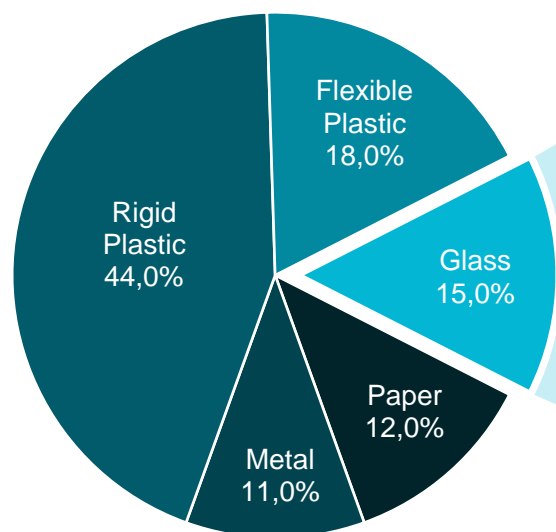
- Short-term decline of 5-10% in sales expected for 2020
- Glass melting is a continuous process with large scale industrial furnaces –sites cannot be “switched off” – furnaces run for their full 12 year useful life
- **The impact of Covid-19 is expected to be limited and to affect Vetropack only in the short-term<sup>1</sup>**

# Applying the segmentation approach to the overall market yields an addressable market of c. EUR 12.3 bn in 2020

Key dimensions of the addressable European market [2019, EUR bn]

## Packaging type

Market value  
[EUR bn] **c. 345.0**



## Region

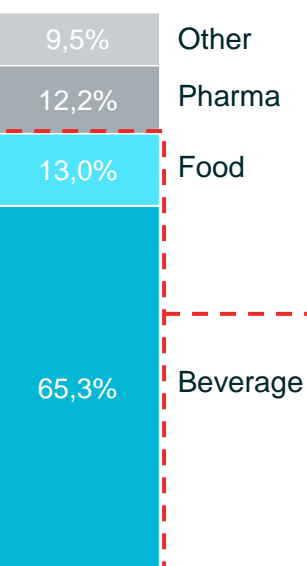
**c. 50.2**

Switzerland  
Italy  
Austria  
Croatia  
Slovakia  
Moldova  
Czech Republic

Rest of Europe

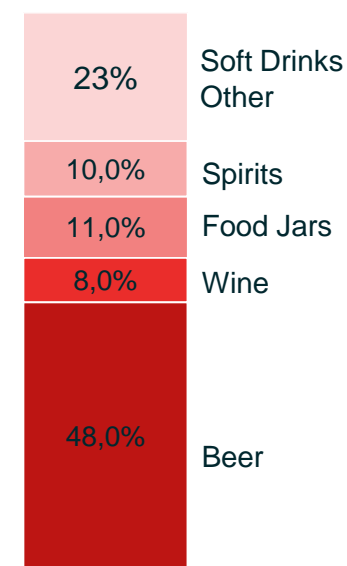
## Application segment

**c. 15.7**



## End product

**c. 12.3**



- The European Packaging Market can be split by material type into Rigid Plastic, Flexible Plastic, Metal, Paper and Glass
- The market is expected to grow moderately at a CAGR of 1.49% from 2020 to 2023. Overall Covid-19 impact expected to be rather limited, differences among segments exist

- Vetropack maintains production plants in Switzerland, Italy, Austria, Croatia, Slovakia, and Czech Republic
- Neighboring countries can be served within a radius of 300km of the plant

- Key application segments for Vetropack are Food and Beverage with a combined sales share of over 98%
- The addressable market opportunity amounts to c. EUR 15.7bn in Europe

- Vetropack generated CHF 705m in revenues in 2019 in the food and beverage sector, only CHF 10m were generated by Müller + Krempel in the pharma and specialty glass sector
- In total the group sold 5.16 bn units of glass packaging across all products

# Covid-19 affects the operations of Vetropack across all organizational functions

## Impact of Covid-19 by organizational function

| Function                   | Driver  | Assessment   | Relevance                                     |
|----------------------------|---|--|---|
| Procurement & Sourcing     | <ul style="list-style-type: none"><li>▪ Custom and trade restrictions</li></ul>   | <ul style="list-style-type: none"><li>▪ Since glass is a rather local business and Vetropack’s suppliers are in 95% of the cases less than 100km away from the plants, impact on resource procurement is rather limited</li><li>▪ Vetropack experiences decrease of export volumes</li></ul>                             | <div><div></div></div> <div><div></div></div> |
| Manufacturing              | <ul style="list-style-type: none"><li>▪ New frameworks for assessment of health risks</li><li>▪ Cases of Covid-19</li></ul>   | <ul style="list-style-type: none"><li>▪ Vetropack disclosed guidelines for behavior of employees to comply with local Covid-19 regulations</li><li>▪ Could lead to short-term company shut-downs and interruption of production, both not observed yet (outside-in analysis)</li></ul>                                   | <div><div></div></div> <div><div></div></div> |
| Warehousing                | <ul style="list-style-type: none"><li>▪ Decrease in beverage orders</li><li>▪ Local circulation restrictions / containment measures</li></ul>   | <ul style="list-style-type: none"><li>▪ Inventory levels will increase due to short-term decline in demand</li><li>▪ Production could face interruption due to missing workers</li></ul>   | <div><div></div></div> <div><div></div></div> |
| Sales                      | <ul style="list-style-type: none"><li>▪ GDP decrease by c. 10% in Europe</li><li>▪ Shut-down of hospitality sector in H1 2020</li></ul>   | <ul style="list-style-type: none"><li>▪ Demand for glass packaging and GDP have a high correlation, Vetropack H1 2020 revenue decreased by 10.4% compared to H1 2019</li><li>▪ Bottle business is not influenced that significant, due to high consumption of barrels instead of bottles in respective sectors</li></ul> | <div><div></div></div> <div><div></div></div> |
| Overall impact and outlook | Covid-19 affects the industry and Vetropack in the <b>short-term</b> , negatively impacting sales and profit margins<br>However, glass packaging is considered <b>essential business</b> with sales expected to return to pre-covid levels as soon as a vaccine is found and distributed to the public (closely linked to a full reopening of the hospitality sector)<br>The impact can be considered rather as an <b>organizational obstacle</b> than a reason for a sustained collapse of the global glass demand |  |   |



# Vetropack convinces on multiple levels, most notably are the strong financial cash flows and the attractive consumer end-markets

## Deal rationale

### 1 Strong financial profile

- Leverageable balance sheet (large fixed asset base can be pledged as collateral)
- High free cash flows before debt service
- Capex needs significant but recurring and predictable

### 2 Leading position in home markets

- Leader (by TPA) in almost every “home market” (market with plant)
- Defendable position due to nature of the glass business: high initial investment costs for plants and short (300km) transport distance pose high entry barriers for other players (on-site and export)

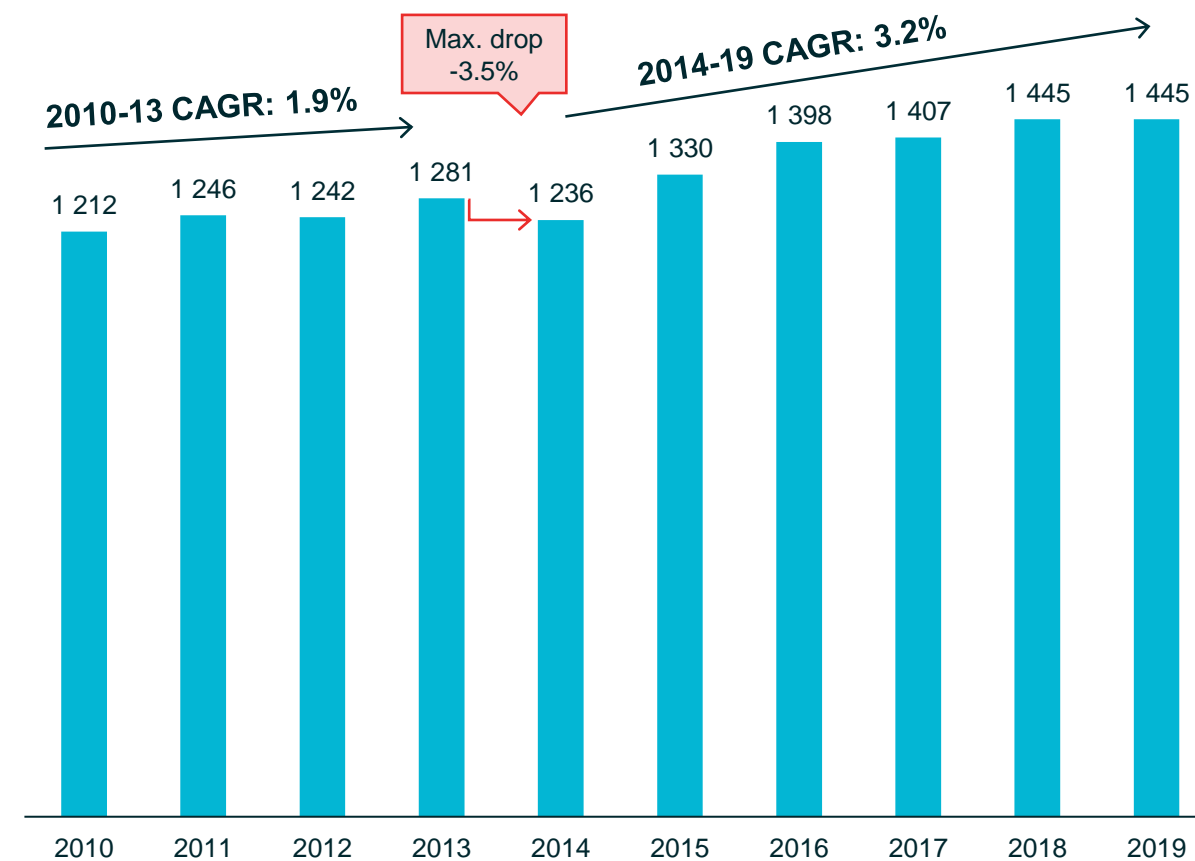
### 3 Attractive growth opportunities and favorable end-market segments

- Opportunities for inorganic growth both horizontally and vertically
- Shift in consumer behavior towards sustainability (focus on closed loop recycling)
- Growing demand for premium packaging

### 4 Management team and human capital











- Management board with longstanding experience in glass packaging industry
- Vetroconsult: In-house consulting group for process optimization<sup>1</sup>.
- Vetroacademy: In-house workforce training center
- Below industry average employee turnover of 10% (FY19)

## Vetropack's volumes show a high degree of resilience, low cyclical volatility and low volatility (in metric tons)



# Internationalization and product mix realignment together with an operational cost reduction program will create significant value for Vetropack

## Value creation levers

|                  | A Internationalization  | A Product Mix Realignment   | B Cost Reduction Initiatives   | C Non-operational measures   |   |
|------------------|---|---|--|--|---|
| Strategy outline | <p>During the holding period, Vetropack will internationalize Western European and Scandinavian countries</p> <p>Objective is to expand the geographical footprint towards high income countries that offer superior growth prospects in stellar end markets</p>  | <p>Transformation of current product portfolio (c.11% premium segment of total) towards premium glass packaging products to profit from higher margins, faster growing end-markets and lower price elasticity</p> <p>Overcome delivery distance limitations (&gt;300 km) of commoditized glass packaging products</p> | <p>Continuous reduction of the main cost-drivers raw material and energy consumption across all Vetropack plants</p> <p>Optimization of NWC towards industry average, last in peer group (e.g. DIO: 200d vs. Ø 80d)</p> <p>Secure sought-after cullet in adequate quantity and quality in competitive Italian market</p>   | <p>Reversion of annual CAPEX spending towards industry benchmark after past 12-year cycle of heavy investments</p> <p>Elevate asset utilization levels</p> <p>Counteract investment periods of negative FCF with tactical divestures</p> |   |
| Lever            | <div>Horizontal acquisitions of <b>HRASTNIK1860</b> &amp; </div> <ul style="list-style-type: none"><li>Steklarna Hrastnik and Vetreria Etrusca serve countries that are complementary to Vetropacks' home markets and expand the company's geographical outreach</li></ul> |   | <div>Vertical integration and expansion of </div> <ul style="list-style-type: none"><li>Raise group-wide cullet levels by 1% annually (partly through Eurovetro)</li><li>Working capital management</li><li>Invest in industry 4.0 process automation and control systems</li></ul> |  | <ul style="list-style-type: none"><li>Smarter CAPEX spending that focusses on process innovation and environmental impact</li><li>Sale of non-operating assets (e.g. real estate and land)</li><li>Sale of soon to be discontinued (end FY21) plant facilities in Trezzano, Italy</li></ul> |
| Assessment       | <p>Risk </p> <p>Return </p>   | <p>Risk </p> <p>Return </p>   | <p>Risk </p> <p>Return </p>  | <p>Risk </p> <p>Return </p>                                    |   |

# A secondary sale or an IPO seem to stand out from the remaining exit strategy. However, due to the circumstances of Vetropack, a secondary sale might be the preferable option

## Exit Options

|   | Secondary Sale  | Sale to a strategic buyer   | Sale in parts   | IPO   |
|---|---|---|---|---|
| <b>Outline</b>  | Sale of our position in Vetropack to another Private Equity firm  | Sale to a strong strategic player in the packaging market   | Possibility to sell by factories/ business units  | List Vetropack on a stock exchange through an Initial Public Offering   |
| <b>Pros</b>    | <ul style="list-style-type: none"> <li>▪ Precedent transactions show a great interest of PE investments in this industry</li> <li>▪ High growth potential in a growing industry with great prospects of returns</li> <li>▪ Fast process and immediate full exit</li> <li>▪ Possibility of forming a syndicate to afford acquisition</li> </ul>  | <ul style="list-style-type: none"> <li>▪ Industry with a strong M&amp;A activity shows numerous potential buyers</li> <li>▪ Existence of larger players with financial resources to acquire Vetropack</li> <li>▪ Significant synergies opportunities and possibility to operate/consolidate position in different markets</li> </ul>                    | <ul style="list-style-type: none"> <li>▪ Due to size, strategic buyers might opt to acquire individual plants accordingly to their specific needs</li> <li>▪ Significant synergies opportunities and possibility to operate/consolidate position in different markets</li> </ul>  | <ul style="list-style-type: none"> <li>▪ As it was previously listed, Vetropack meets the requirements and is aware of the process</li> <li>▪ Listing allows more freedom to the management team, bringing motivation</li> <li>▪ Going public serves as advertisement for the company and improves its credibility</li> </ul> |
| <b>Cons</b>  | <ul style="list-style-type: none"> <li>▪ Potentially limited interest from secondary buyers, as only a few funds are able to stem such an investment, which could push down selling price</li> </ul>  | <ul style="list-style-type: none"> <li>▪ Large acquisition price</li> <li>▪ Slower and heavier process (Due diligence)</li> </ul>   | <ul style="list-style-type: none"> <li>▪ Not a full exit, weakening Vetropack's position</li> <li>▪ Long and difficult process</li> </ul>   | <ul style="list-style-type: none"> <li>▪ Higher levels of uncertainty</li> <li>▪ Changing back into public may send a confusing message to stakeholders</li> </ul>  |
| <b>Potential buyers</b>   |     |     |     | Stock Exchange  |

# Vetropack grew revenues in the last five years on average by 5.1%, the acquisition of the plant in Italy contributed significantly to top line growth

Income statement analysis | Financials (1/5)

| CHFm                                     | FY10        | FY11          | FY12        | FY13        | FY14          | FY15          | FY16        | FY17        | FY18         | FY19         | FY20B        |
|--|-------------|---------------|-------------|-------------|---------------|---------------|-------------|-------------|--------------|--------------|--------------|
| Switzerland                              | 100         | 91            | 82          | 83          | 82            | 74            | 70          | 69          | 74           | 75           | 41           |
| Austria                                  | 195         | 189           | 188         | 195         | 191           | 176           | 172         | 178         | 199          | 203          | 96           |
| Czech Republic                           | 87          | 75            | 81          | 80          | 78            | 71            | 71          | 62          | 73           | 74           | 32           |
| Croatia                                  | 120         | 108           | 103         | 113         | 120           | 107           | 116         | 120         | 128          | 124          | 47           |
| Slovakia                                 | 46          | 38            | 41          | 42          | 50            | 43            | 45          | 45          | 47           | 61           | 29           |
| Ukraine                                  | 83          | 77            | 96          | 95          | 66            | 51            | 47          | 57          | 69           | 82           | 27           |
| Italy                                    | -           | -             | -           | -           | -             | 27            | 71          | 90          | 91           | 87           | 45           |
| Glass packaging                          | 630         | 577           | 591         | 608         | 587           | 548           | 592         | 622         | 681          | 705          | 318          |
| Specialty glass <sup>3</sup>             | 13          | 13            | 13          | 13          | 13            | 9             | 9           | 9           | 10           | 10           | 6            |
| <b>Net sales from goods and services</b> | <b>643</b>  | <b>589</b>    | <b>604</b>  | <b>621</b>  | <b>599</b>    | <b>557</b>    | <b>602</b>  | <b>632</b>  | <b>691</b>   | <b>715</b>   | <b>324</b>   |
| YoY growth in %                          | -           | (8%)          | 3%          | 3%          | (3%)          | (7%)          | 8%          | 5%          | 9%           | 4%           | (10%)        |
| Other operating income                   | 10          | 10            | 12          | 10          | 10            | 11            | 12          | 11          | 12           | 13           | 6            |
| <b>Total revenue</b>                     | <b>652</b>  | <b>600</b>    | <b>617</b>  | <b>631</b>  | <b>609</b>    | <b>568</b>    | <b>614</b>  | <b>642</b>  | <b>703</b>   | <b>728</b>   | <b>329</b>   |
| YoY growth in %                          | -           | (8.3%)        | 2.5%        | 2.7%        | (3.5%)        | (7.1%)        | 8.0%        | 5.0%        | 9.4%         | 3.5%         | (10%)        |
| <b>Gross profit</b>                      | <b>(92)</b> | <b>(87)</b>   | <b>(87)</b> | <b>(89)</b> | <b>(83)</b>   | <b>(86)</b>   | <b>(92)</b> | <b>(93)</b> | <b>(103)</b> | <b>(107)</b> | -            |
| YoY growth in %                          | 67%         | 66%           | 66%         | 66%         | 68%           | 68%           | 70%         | 72%         | 72%          | 72%          | 71%          |
| <b>Operating profit (EBITDA)</b>         | <b>152</b>  | <b>115</b>    | <b>113</b>  | <b>113</b>  | <b>121</b>    | <b>97</b>     | <b>112</b>  | <b>140</b>  | <b>155</b>   | <b>165</b>   | <b>63</b>    |
| EBITDA margin                            | 24%         | 19%           | 19%         | 18%         | 20%           | 18%           | 19%         | 22%         | 22%          | 23%          | 20%          |
| <b>Consolidated profit</b>               | <b>39</b>   | <b>59</b>     | <b>84</b>   | <b>56</b>   | <b>49</b>     | <b>42</b>     | <b>43</b>   | <b>57</b>   | <b>58</b>    | <b>73</b>    | <b>46</b>    |
| Profit margin                            | 6%          | 10%           | 14%         | 9%          | 8%            | 8%            | 7%          | 9%          | 8%           | 10%          | 14%          |
| <b>Organic vs. inorganic growth</b>      | <b>FY10</b> | <b>FY11</b>   | <b>FY12</b> | <b>FY13</b> | <b>FY14</b>   | <b>FY15</b>   | <b>FY16</b> | <b>FY17</b> | <b>FY18</b>  | <b>FY19</b>  | <b>FY20B</b> |
| Organic growth                           | -           | (8.3%)        | 2.5%        | 2.7%        | (3.5%)        | (11.5%)       | 0.1%        | 2.0%        | 9.4%         | 4.6%         |              |
| Inorganic growth                         | -           | -             | -           | -           | -             | 4.5%          | 8.0%        | 3.0%        | 0.0%         | (1.1%)       |              |
| <b>Total Growth</b>                      | <b>-</b>    | <b>(8.3%)</b> | <b>2.5%</b> | <b>2.7%</b> | <b>(3.5%)</b> | <b>(7.1%)</b> | <b>8.0%</b> | <b>5.0%</b> | <b>9.4%</b>  | <b>3.5%</b>  |              |

## Highlights

- Extensive modernizations as well as capacity expansions of the two-color glass furnaces in Slovakia and Ukraine formed the basis for strong topline growth in Eastern Europe
- Vetropack launched its operations in Trezzano sul Naviglio, Italy in FY15, first five months of operations generated CHF 26.8m
- As "Specialty Glass" Vetropack accounts revenues generated in the subsidiary Müller + Krempel Ltd. acquired in 1948 – the subsidiary trades products for the pharmaceutical industry, flasks and laboratory equipment – non-core business
- The decline of 3% and 7% in FY14 and FY15 respectively is mainly attributable to economic instability in Ukraine, which impacted consumer activity negatively. Moreover, rising imports of already in glass packed goods in Austria and Switzerland triggered further decrease in demand
- COVID-19 led to decrease of 10.4% in revenue in H1 2020 compared to H1 2019
- Continuous margin improvement attributable to investments in innovation and new furnace technology that decrease raw material cost and energy consumption while increasing output
- As inorganic growth only the revenue generated in the Italian plant in Trezzano is counted in, previous investments such as the plant in Ukraine are considered as existing base

# Despite increasing overall costs, Vetropack managed to decrease energy costs while increasing output and thereby optimized profitability margins over the last years

Cash flow statement analysis | Financials (2/5)

| CHF millions                     | FY10       | FY11       | FY12       | FY13       | FY14       | FY15       | FY16       | FY17       | FY18       | FY19       | FY20B      |
|----------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Raw material                     | (92)       | (87)       | (87)       | (89)       | (83)       | (86)       | (92)       | (93)       | (103)      | (107)      | -          |
| Merchandise                      | (10)       | (12)       | (11)       | (9)        | (9)        | (10)       | (9)        | (8)        | (7)        | (10)       | -          |
| COGS                             | (102)      | (98)       | (98)       | (98)       | (92)       | (96)       | (101)      | (101)      | (110)      | (116)      | (55)       |
| <b>Contribution Margin I</b>     | <b>86%</b> | <b>85%</b> | <b>86%</b> | <b>86%</b> | <b>86%</b> | <b>85%</b> | <b>85%</b> | <b>86%</b> | <b>86%</b> | <b>86%</b> | <b>85%</b> |
| Energy Costs                     | (120)      | (111)      | (123)      | (125)      | (109)      | (94)       | (90)       | (89)       | (96)       | (95)       | (44)       |
| <b>Contribution Margin II</b>    | <b>67%</b> | <b>66%</b> | <b>66%</b> | <b>66%</b> | <b>68%</b> | <b>68%</b> | <b>70%</b> | <b>72%</b> | <b>72%</b> | <b>72%</b> | <b>71%</b> |
| Personnel expense                | (131)      | (124)      | (130)      | (133)      | (133)      | (129)      | (142)      | (150)      | (160)      | (170)      | (83)       |
| Maintenance and repairs          | (27)       | (25)       | (31)       | (33)       | (26)       | (26)       | (28)       | (31)       | (32)       | (33)       | -          |
| Moulds                           | (19)       | (17)       | (18)       | (18)       | (16)       | (15)       | (14)       | (5)        | (7)        | (6)        | -          |
| Packaging material               | (28)       | (26)       | (27)       | (28)       | (27)       | (24)       | (26)       | (27)       | (27)       | (29)       | -          |
| Transport costs                  | (35)       | (33)       | (33)       | (35)       | (36)       | (36)       | (42)       | (43)       | (50)       | (46)       | -          |
| Other admin and opex             | (39)       | (49)       | (45)       | (49)       | (49)       | (50)       | (60)       | (57)       | (67)       | (68)       | -          |
| Operating expenses               | (279)      | (275)      | (283)      | (296)      | (287)      | (281)      | (312)      | (313)      | (342)      | (352)      | (167)      |
| <b>Operating Profit (EBITDA)</b> | <b>152</b> | <b>115</b> | <b>113</b> | <b>113</b> | <b>121</b> | <b>97</b>  | <b>112</b> | <b>140</b> | <b>155</b> | <b>165</b> | <b>63</b>  |
| <b>EBITDA margin</b>             | <b>24%</b> | <b>19%</b> | <b>19%</b> | <b>18%</b> | <b>20%</b> | <b>18%</b> | <b>19%</b> | <b>22%</b> | <b>22%</b> | <b>23%</b> | <b>20%</b> |
| D&A (tangible assets)            | (54)       | (50)       | (51)       | (55)       | (55)       | (50)       | (54)       | (62)       | (70)       | (75)       | (39)       |
| D&A (intangible assets)          | (1)        | (1)        | (3)        | (7)        | (7)        | (8)        | (8)        | (6)        | (3)        | (2)        | -          |
| <b>Operating Result (EBIT)</b>   | <b>97</b>  | <b>64</b>  | <b>59</b>  | <b>52</b>  | <b>59</b>  | <b>39</b>  | <b>49</b>  | <b>72</b>  | <b>83</b>  | <b>88</b>  | <b>25</b>  |
| <b>EBIT margin</b>               | <b>15%</b> | <b>11%</b> | <b>10%</b> | <b>8%</b>  | <b>10%</b> | <b>7%</b>  | <b>8%</b>  | <b>11%</b> | <b>12%</b> | <b>12%</b> | <b>8%</b>  |
| <b>Consolidated Profit</b>       | <b>39</b>  | <b>59</b>  | <b>84</b>  | <b>56</b>  | <b>49</b>  | <b>42</b>  | <b>43</b>  | <b>57</b>  | <b>58</b>  | <b>73</b>  | <b>46</b>  |
| <b>Profit margin</b>             | <b>6%</b>  | <b>10%</b> | <b>14%</b> | <b>9%</b>  | <b>8%</b>  | <b>8%</b>  | <b>7%</b>  | <b>9%</b>  | <b>8%</b>  | <b>10%</b> | <b>14%</b> |

## Total cost split (2019):

| Energy costs           |       | Maintenance          |      | Transport   |      |
|------------------------|-------|----------------------|------|-------------|------|
| 20,6%                  | 16,9% | 30,2%                | 7,0% | 5,2%        | 8,2% |
| Raw materials & merch. |       | Personnel & salaries |      | Other admin |      |
|                        |       |                      |      | Packaging   |      |

## Highlights

- Due to long-term contracts with suppliers, raw materials do not have significant fluctuations in purchase prices and are linear to revenues in the respective year
- While growing revenues, the increased use of end-fired furnaces to prev. installed normal furnaces allows Vetropack to decrease energy cost and CO2 emission significantly
- Personal expenses are growing on a constant rate which can be interpreted as continuous growth of the organization. Important to mention are higher salary costs at Vetropacks main plants compared to other (especially Eastern) European competitors
- Application of the accounting framework FER 30 (Swiss IFRS), led to the result that newly acquired moulds were capitalized from 2017 on and depreciated over a maximum of two years, leading to a major decrease of moulds op. expenditures
- Due to established customer relationships and repeating orders of customers, transportation cost are linear to revenues and tons produced
- The new CEO, who joined in 2018, managed to optimize EBITDA, EBIT and profit margin significantly by restructuring parts of the company and constantly modernizing manufacturing facilities, even in 1H 2020 under COVID-19 impact margins improve



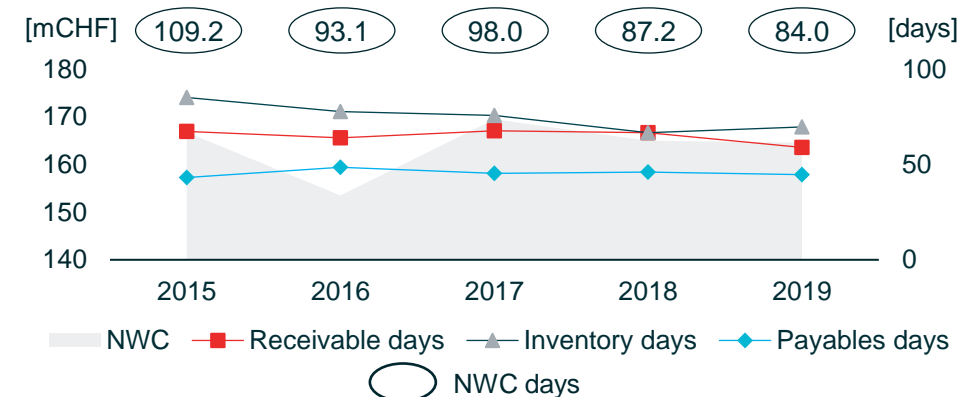
# High liquid funds position allow Vetropack to finance most investments from own funds and further the company managed to steadily decrease NWC days since 2015

Balance sheet analysis | Financials (3/5)

| CHF millions                                      | FY10       | FY11       | FY12       | FY13       | FY14       | FY15       | FY16       | FY17       | FY18       | FY19       | FY20B      |
|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Liquid funds                                      | 90         | 113        | 59         | 53         | 86         | 62         | 90         | 134        | 132        | 101        | 103        |
| Accounts receivables                              | 93         | 97         | 99         | 101        | 93         | 103        | 105        | 117        | 126        | 116        | 127        |
| Other short-term receivables                      | 13         | 18         | 11         | 11         | 14         | 12         | 13         | 10         | 9          | 10         | 9          |
| Inventory (net)                                   | 100        | 116        | 122        | 130        | 111        | 130        | 128        | 131        | 126        | 137        | 149        |
| Other short-term assets                           | 19         | 2          | 7          | 5          | 6          | 6          | 4          | 16         | 7          | 2          | 2          |
| <b>Subtotal short-term Assets</b>                 | <b>315</b> | <b>345</b> | <b>298</b> | <b>299</b> | <b>310</b> | <b>312</b> | <b>340</b> | <b>408</b> | <b>400</b> | <b>365</b> | <b>390</b> |
| Tangible assets                                   | 378        | 384        | 428        | 448        | 440        | 438        | 460        | 499        | 523        | 559        | 534        |
| Financial assets                                  | 15         | 15         | 15         | 17         | 18         | 17         | 29         | 18         | 19         | 19         | 16         |
| Intangible assets                                 | 7          | 22         | 30         | 29         | 24         | 17         | 12         | 8          | 6          | 7          | 6          |
| <b>Subtotal long-term assets</b>                  | <b>400</b> | <b>421</b> | <b>474</b> | <b>495</b> | <b>483</b> | <b>472</b> | <b>501</b> | <b>524</b> | <b>548</b> | <b>584</b> | <b>556</b> |
| <b>Total assets</b>                               | <b>715</b> | <b>766</b> | <b>772</b> | <b>794</b> | <b>792</b> | <b>784</b> | <b>841</b> | <b>932</b> | <b>947</b> | <b>949</b> | <b>946</b> |
| Accounts payables                                 | 37         | 48         | 46         | 42         | 57         | 66         | 80         | 78         | 87         | 88         | 77         |
| Short-term financial debts                        | 36         | 55         | 9          | 0          | 0          | 20         | 1          | 12         | 54         | 0          | 0          |
| Other short-term liabilities                      | 17         | 16         | 14         | 17         | 16         | 20         | 19         | 22         | 20         | 23         | 24         |
| Deferrals   | 13         | 19         | 20         | 21         | 15         | 20         | 20         | 21         | 23         | 23         | 33         |
| Short-term provisions                             | 3          | 4          | 4          | 6          | 2          | 2          | 3          | 4          | 3          | 4          | 11         |
| <b>Subtotal short-term liabilities</b>            | <b>106</b> | <b>141</b> | <b>94</b>  | <b>86</b>  | <b>90</b>  | <b>128</b> | <b>122</b> | <b>138</b> | <b>187</b> | <b>138</b> | <b>145</b> |
| Long-term debt                                    | 29         | 25         | 5          | 29         | 32         | 32         | 74         | 64         | 8          | 22         | 22         |
| Long-term provisions and other                    | 34         | 32         | 35         | 37         | 38         | 41         | 39         | 43         | 40         | 37         | 36         |
| <b>Subtotal long-term liabilities</b>             | <b>63</b>  | <b>57</b>  | <b>40</b>  | <b>66</b>  | <b>69</b>  | <b>73</b>  | <b>113</b> | <b>106</b> | <b>49</b>  | <b>59</b>  | <b>57</b>  |
| Share capital & capital reserves                  | 28         | 21         | 21         | 21         | 20         | 20         | 20         | 20         | 20         | 20         | 20         |
| Retained Earnings                                 | 494        | 486        | 529        | 591        | 563        | 522        | 543        | 611        | 631        | 659        | 677        |
| Consolidated Profit                               | 39         | 59         | 84         | 56         | 49         | 42         | 43         | 57         | 58         | 73         | 46         |
| Minority interests                                | 2          | 3          | 5          | 5          | 1          | 0          | 0          | 1          | 2          | 0          | 0          |
| <b>Subtotal Equity</b>                            | <b>547</b> | <b>569</b> | <b>638</b> | <b>643</b> | <b>633</b> | <b>584</b> | <b>605</b> | <b>688</b> | <b>712</b> | <b>752</b> | <b>744</b> |
| <b>Total liabilities &amp; shareholder equity</b> | <b>715</b> | <b>766</b> | <b>772</b> | <b>794</b> | <b>792</b> | <b>784</b> | <b>841</b> | <b>932</b> | <b>947</b> | <b>949</b> | <b>946</b> |

## Highlights

- Continuous improved performance allowed for a strong cash flow profile and accumulating cash and cash equivalents position. The high cash position allows Vetropack to finance most investments with own funds
- Tangible assets as of 31 December 2019 amount to CHF 559.2m and therefore represent c. 59% of total assets. More than 50% of the tangible assets are production facilities
- Intangible assets include brands, patents, licences, software and other intangibles.
- Asset intensity in FY19 is at 133%, having decreased c. 15% since FY17
- Net working capital has developed constant while Vetropack managed to decrease NWC days since 2015



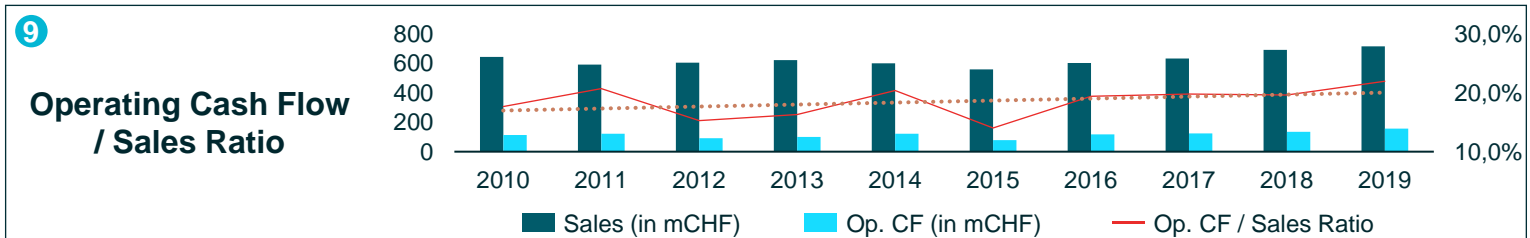


# High liquid funds position allows Vetropack to finance most investments debt-free - the company managed to steadily decrease NWC days since 2015

Balance sheet & cash flow statement | Financials (4/5)

| Balance Sheet in CHFm        | FY10            | FY11   | FY12   | FY13   | FY14   | FY15             | FY16   | FY17   | FY18   | FY19   | FY20B  |
|------------------------------|-----------------|--------|--------|--------|--------|------------------|--------|--------|--------|--------|--------|
| Liquid funds and equivalents | 90              | 113    | 59     | 53     | 86     | 62 <sup>1</sup>  | 90     | 134    | 132    | 101    | 103    |
| NWC excl. liquid funds       | 119             | 91     | 146    | 161    | 134    | 122 <sup>2</sup> | 128    | 137    | 81     | 126    | 6      |
| Total debt                   | 65 <sup>3</sup> | 80     | 15     | 29     | 32     | 52               | 75     | 76     | 62     | 22     | 22     |
| Net debt                     | (26)            | (34)   | (44)   | (24)   | (54)   | (10)             | (15)   | (57)   | (69)   | (79)   | (81)   |
| DIO                          | 157.4d          | 177.2d | 174.5d | 185.4d | 184.7d | 215.2d           | 215.7d | 206.6d | 194.1d | 198.6d | 199.7d |
| DRO                          | 52.7d           | 59.9d  | 59.9d  | 59.2d  | 56.3d  | 67.3d            | 64.1d  | 67.6d  | 64.3d  | 61.7d  | 63.4d  |
| DPO                          | 25.7d           | 69.9d  | 69.1d  | 64.6d  | 75.8d  | 109.9d           | 122.0d | 126.3d | 125.1d | 132.2d | 127.9d |

| Cash flow statement in CHFm          | FY10             | FY11 | FY12 | FY13 | FY14 | FY15  | FY16 | FY17             | FY18  | FY19  | FY20B |
|--------------------------------------|------------------|------|------|------|------|-------|------|------------------|-------|-------|-------|
| Consolidated profit incl. minorities | 40               | 60   | 85   | 58   | 47   | 41    | 43   | 57               | 60    | 74    | 46    |
| YoY growth in %                      | -                | (8%) | 3%   | 3%   | (3%) | (7%)  | 8%   | 5%               | 9%    | 4%    | (10%) |
| CF from operations excl. Δ in NWC    | 123              | 117  | 98   | 110  | 107  | 104   | 105  | 126 <sup>4</sup> | 136   | 153   | 76    |
| Δ in NWC                             | (9)              | 5    | (6)  | (9)  | 15   | (26)  | 12   | (2)              | (0)   | 4     | 28    |
| CF from operations incl. Δ in NWC    | 113              | 122  | 92   | 101  | 122  | 78    | 117  | 125 <sup>6</sup> | 136   | 157   | 48    |
| CF from investment activities        | (52)             | (85) | (67) | (56) | (71) | (94)  | (96) | (65)             | (107) | (129) | (19)  |
| FCF before debt service              | 62               | 37   | 25   | 45   | 51   | (16)  | 21   | 59               | 29    | 28    |       |
| Cash conversion as % of EBITDA       | 44% <sup>7</sup> | 29%  | 22%  | 37%  | 46%  | (14%) | 18%  | 45%              | 19%   | 17%   |       |
| CF from financing activities         | (59)             | (11) | (79) | (51) | (12) | 0     | 9    | (18)             | (30)  | (60)  | (26)  |
| ForEx Differentials                  | (17)             | (3)  | (1)  | (0)  | (6)  | (8)   | (1)  | 2                | (1)   | 1     | (1)   |
| Change in liquid funds               | (14)             | 23   | (55) | (6)  | 33   | (24)  | 28   | 44               | (2)   | (31)  | 2     |



## Highlights

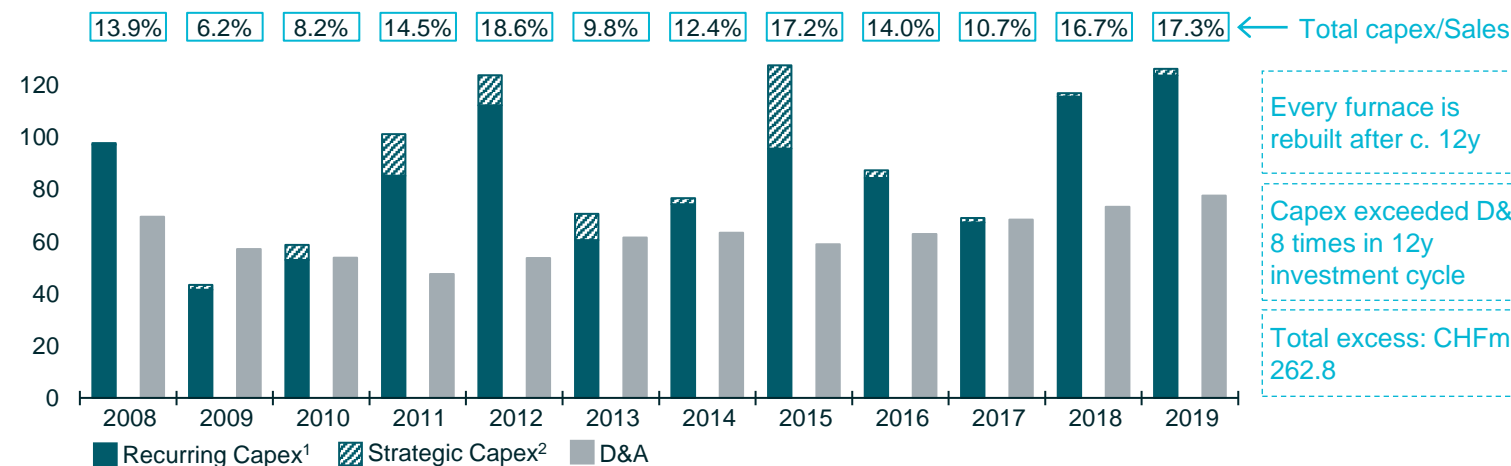
- High cash flows allow even in years of high investments to recover on average lower cash balances immediately
- Net working capital has developed constant while Vetropack managed to decrease NWC days since FY15
- Net debt is negative across all periods of observation, which is attributable to low levels of debt and large cash reserves
- Operating cashflow improvement of 12.8% compared to prior year attributable to increased demand and improvement in efficiencies
- Acquisition of glassworks in Trezzano in Italy to strengthen position in domestic market, investment cash flow only slightly impacted due to parallel sale of non-operating real estate
- Cash flow from investment activities is above average in FY18 and FY19 due to the modernizations and restoring in Eastern European glass works
- Cash conversion in the observation period on average at 26% - only negative period in FY15 attributable to the plant investment in Trezzano, Italy
- Significant increase attributed to the payback of a short-term bank loan with an interest rate of 0.7% and run rate until June 2019
- The trendline of the ratio shows that Vetropack manages to increase cash generation year-over-year relative to the respective revenues

# Vetropack invested heavily in its asset base during the last 12-year investment cycle, outpacing D&A by over CHF 260m

CAPEX/Investment cycle | Financials (5/5)

| CHF millions                               | FY08      | FY09      | FY10      | FY11               | FY12       | FY13      | FY14      | FY15        | FY16      | FY17      | FY18       | FY19       |
|--|-----------|-----------|-----------|--------------------|------------|-----------|-----------|-------------|-----------|-----------|------------|------------|
| Switzerland                                | 5         | 3         | 4         | 7                  | 8          | 17        | 6         | 2           | 5         | 8         | 3          | 3          |
| Austria                                    | 10        | 11        | 5         | 37                 | 43         | 13        | 17        | 22          | 39        | 13        | 49         | 8          |
| Czech Republic                             | 15        | 5         | 27        | 4                  | 9          | 8         | 36        | 6           | 11        | 5         | 6          | 9          |
| Croatia                                    | 44        | 10        | 3         | 8                  | 31         | 6         | 9         | 28          | 9         | 12        | 6          | 25         |
| Slovakia                                   | 18        | 6         | 4         | 3                  | 5          | 4         | 3         | 5           | 9         | 7         | 34         | 29         |
| Ukraine                                    | 2         | 2         | 3         | 10                 | 4          | 3         | 1         | 1           | 7         | 13        | 9          | 27         |
| Italy                                      | -         | -         | -         | -                  | -          | -         | -         | 1           | 3         | 7         | 8          | 22         |
| Slovenia                                   | 4         | 3         | 2         | Plant discontinued |            |           |           |             |           |           |            |            |
| <b>Recurring capex<sup>1</sup></b>         | <b>97</b> | <b>40</b> | <b>47</b> | <b>69</b>          | <b>101</b> | <b>51</b> | <b>72</b> | <b>64</b>   | <b>81</b> | <b>66</b> | <b>114</b> | <b>121</b> |
| <b>Strategic capex<sup>2</sup></b>         | <b>1</b>  | <b>2</b>  | <b>6</b>  | <b>16</b>          | <b>12</b>  | <b>10</b> | <b>2</b>  | <b>32</b>   | <b>3</b>  | <b>2</b>  | <b>1</b>   | <b>3</b>   |
| Depreciation & Amortization                | 70        | 57        | 54        | 48                 | 54         | 62        | 63        | 59          | 63        | 68        | 73         | 78         |
| <b>FCF before debt service (OCF - ICF)</b> | <b>63</b> | <b>87</b> | <b>62</b> | <b>37</b>          | <b>25</b>  | <b>45</b> | <b>51</b> | <b>(16)</b> | <b>21</b> | <b>60</b> | <b>29</b>  | <b>28</b>  |

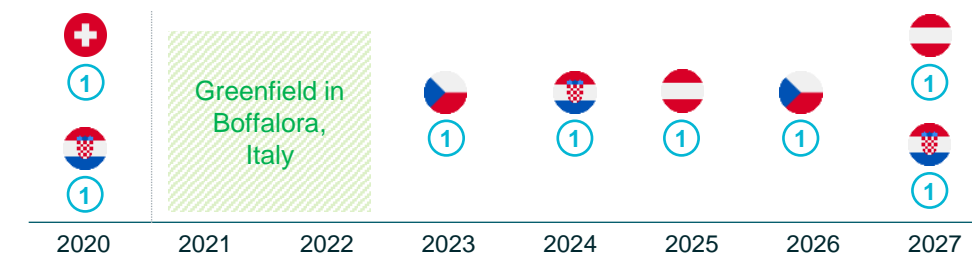
## Total capex significantly exceeding D&A in current investment cycle



## Investment cycle analysis

- 1 Total capex (recurring and strategic) exceeded D&A in 8 of 12 years during the investment cycle, underlining growth and modernization efforts (even after adjusting for inflation)
- 2 High investment costs in Austria correspond to Vetropacks largest glassworks with the five furnaces (3 in Kremsmünster, 2 in Pöchlarn), producing over 400k TPA
- 3 Large strategic investments associated with the implementation of PRISMA, a software for group-wide process and SAP infrastructure
- 4 Acquisition of glassworks in Trezzano, Italy responsible for the only negative FCF before debt service during the whole investment cycle
- 5 High capex spendings in FY19 driven by the (re-)built and/or overhaul of a total of five furnaces across four plants to ensure products can be manufactured with state-of-the-art technology while improving energy consumption

## Outlook: # of furnaces to be rebuilt/overhauled in next 7 years



Source: Vetropack annual reports

1) Recurring Capex refers to investments in tangible assets, e.g. rebuilding a furnace

2) Strategic Capex refers to investments for company acquisitions, acquisitions of consolidated companies and intangible assets

# As sustainability concerns grow among consumers, the FMCG industry focuses on high recyclability and recycled content

## Sustainability – Glass vs. plastics

### Glass – the sustainable choice for F&B

#### Unique characteristics

- 1 Inert & impermeable – preserves the natural taste
- 2 Premium feel – associated with high value
- 3 Sustainable – 100% recyclable in closed loop  
 —→ One glass bottle can be recycled into a new glass bottle **infinitely without using any additional raw material**

#### Consumer choice



#### Glass is a local product

- ! Due to its weight, container glass is only shipped under 300km distance in most cases

### Consumers environmental concerns are driving FMCG companies to promote sustainability

#### Share of commitments by FMCG companies to support sustainability<sup>1</sup>, by type, % (n=94)



- Increase recyclability up to 100%
- Reduce packaging weight by 20-50%
- Incentivize customers to use recyclable options
- Incorporate high degree of recycled content in the packaging
- Eliminate plastic peripherals, such as single-use bags, where possible
- Partner with suppliers to reduce consumption and increase substitutes

#### Plastics

- Global leakage of plastic waste is forecast to be around 19 percent – **only 16 percent of all plastic waste is recycled into new plastics** (40% landfill, 25% incineration)
- Effective January 1, 2021, the EU **will tax non-recycled plastic packaging waste** at a rate of EUR 0.8 per kilogram

#### Glass

- Glass **recycling rate in Europe at 74%** (over 12 million tons of glass containers and jars)
- Constantly decreasing glass container weight: glass bottles weigh 50% less than 50 years ago
- Consumers favor weight reduction of glass bottles when the environmental benefits are highlighted

# Glass is made from primary and secondary materials – cullet is favored by manufacturers due to its superior characteristics

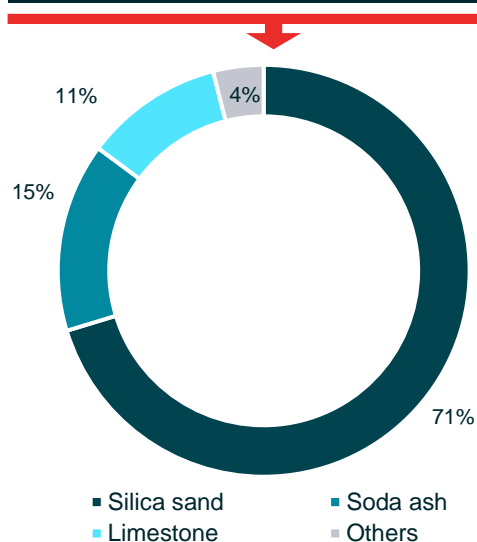
Two kinds of input materials

## Input material mix

### Two sources of glass input material

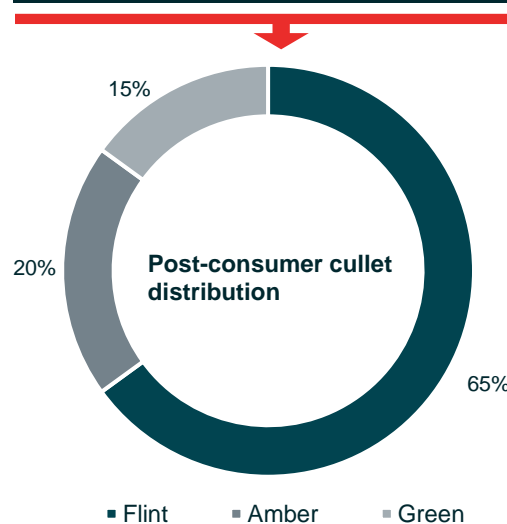
#### 1 Primary material

Silica sand  
Soda ash  
Limestone  
c. 45%



#### 2 Secondary material

Cullet  
c. 55%



Primary raw materials and cullet are fully interchangeable – one glass bottle can be reprocessed into a new one without material loss  
Energy savings of 3% for every 10% cullet used























Cullet, if available and impurity-free, is the preferred input material to produce glass

## Comments

- Glass is made from primary raw materials such as silica sand and soda ash, but also from secondary materials such as recycled glass (cullet)
- Cullet is the preferred input material as it saves 3% of energy and 5% of CO2 emissions for every 10% used, also extending furnace life due to lower melting temperatures
- Producing glass from cullet also requires less input material, as a metric ton of cullet replaces 1.2 metric tons of raw material

# The wholesale glass manufacturing market benefits from favorable market conditions and increasing environmental consciousness of its customers – Covid-19 effects in short-term

Trends and drivers affecting the European Packaging market according to Credit Suisse

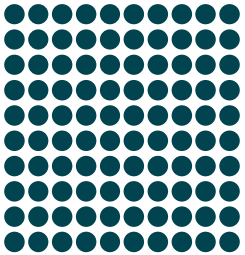
| Driver                                  | Trend                                  | Impact  | Relevance   | Trend   |
|---|--|---|---|---|
| Demography and Lifestyle                | Health and convenience                 | New regulatory requirements and strong drive for innovation   |    |    |
|   | Smaller Households                     | Smaller Packages = larger consumption of packing material   |    |    |
|   | Urbanization of population             | Increased need for packaging with shift from local  |    |    |
|   | GDP growth                             | Highly correlated with glass packaging demand   |    |    |
|   | Emerging vs. mature market             | Emerging: need for basic packaging / Mature market: focus on packaging design to sell product           |    |    |
| Sustainability and Environmental issues | Regulations on packaging recycling     | Materials that lack recyclability might lose market share   |    |    |
|   | Sustainability, traceability, safety   | Raw material procurement from “good” sources, renewable (glass) vs. non-renewable (oil-based plastics)  |    |    |
|   | Introduction of new materials          | Newly introduced regulations and technologies create new challenges and opportunities for new materials |  |  |
|   | Less packaging materials, light weight | Promoting changes in pack mix from glass and metal to paperboard and flexible packaging                 |  |  |
| Other external drivers                  | E-commerce and retail globalization    | Increase need for packaging materials to protect and transport goods                                    |  |  |
|   | Raw material prices                    | Increased prices of raw materials used in glass production  |  |  |



# High penetration rates of glass among spirits, wine and beer, due to its superior characteristics and premium feel – Limited use for soft drinks and food

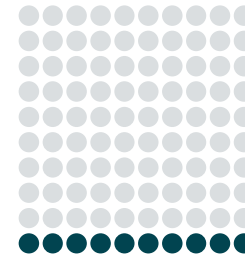
Adressable end-product markets dynamics

## Spirits



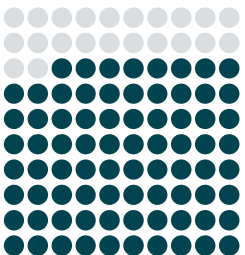
- Major markets in which growth is observed are Southern and Western Europe and United States and Asia due to imports from Europe
- Customer base is **highly consolidated**, with the major global brands of spirits owned by a limited number of players

## Soft drinks



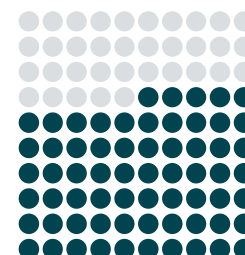
- Glass packaging has been partly replaced by PET bottles and metal cans
- In the fruit juice segments (small containers) used particularly for restaurants and cafés glass as packaging type is still well positioned
- Example:** Coca Cola glass bottles only available in bars and restaurants

## Wine



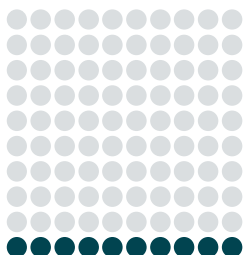
- The EU wine market is stagnating/decreasing However there is **growth in new markets** - Argentina, Chile, Australia and South Africa – to which European wine makers sell to
- Customer base is **very fragmented** composed of many local and regional wine producers

## Beer



- The customer base is **highly concentrated** with growth observed in Eastern European countries
- Glass is the first choice among brewers as it preserves the beverages purity of taste
- Demand for premium small batch production increases due to the lasting rise of craft beer

## Food



- This market is characterized by a large number of small niche markets , such as traditional jams, yoghurts, baby food
- High price sensitivity among young households led to a decrease of glass packaged foods as plastic is cheaper

## Pharma

- Highly regulated market
- Demand for glass packaging, especially glass vials, is increasing and boosted by the COVID crisis

## Cosmetics

- High growth observed in emerging markets
- Glass is increasingly used due to its premium product associations



# During the internal market and company analysis several interviews with leading industry veterans gave beneficial insights for market understanding, value creation strategies and valuation

Selected industry advisors for Vetropack transaction

## Adeline Farrely

**Secretary General at FEVE - The European Container Glass Federation**

Mrs. Farrely is the Secretary General of the European Container Glass Federation (FEVE) since 2008. Prior to that Adeline served as the Communications Director for EuropaBio – the European biotechnology industry association in Brussels. She has held positions in both the European Commission and the European Parliament.



[LinkedIn](#)

## Matthieu Hubert

**Glass Engineer – Development Associate at Corning Incorporated**

M. Huber is responsible for the management and execution of projects in contract research for the glass industry worldwide in the field of glass science and glass technology, covering among others:

- Melting, fining and foaming processes of ind. glass melts
- Chemistry of glasses and glass melts
- Energy consumption and environmental impact reduction
- Development and optimization of glass compositions



[LinkedIn](#)

## Dipl. Ing. Andre Ommer

**CEO of Glassglobal Group**

Mr. Ommer currently acts as CEO of glassglobal Group ([www.glassglobal-group.com](http://www.glassglobal-group.com)), which is globally acknowledged as world's leading glass portal ([www.glassglobal.com](http://www.glassglobal.com)). The portal attracts millions of visitors every year and is the leading information broker to the glass industry today.

In addition, André Ommer is managing owner at glass global consulting GmbH.



[LinkedIn](#)

## Bettina Heuter

**Marketing Director at OGIS GmbH**

Mrs. Heuter is mainly responsible for customer contacts and marketing within the internationally operating network of OGIS GmbH, a consultancy and industrial advisor in the glass packaging industry. Her core areas of expertise are industry studies as well as the orchestration of consulting projects for corporate clients in the field of glass packaging.



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# Vetropack grew revenues in the last five years on average by 5.1%, the acquisition of the plant in Italy contributed significantly to the top line growth

## Income statement analysis | Financials

| CHF millions                             | FY10        | FY11          | FY12        | FY13        | FY14          | FY15          | FY16        | FY17        | FY18        | FY19        | FY20B        |
|--|-------------|---------------|-------------|-------------|---------------|---------------|-------------|-------------|-------------|-------------|--------------|
| Switzerland                              | 100         | 91            | 82          | 83          | 82            | 74            | 70          | 69          | 74          | 75          | 41           |
| Austria                                  | 195         | 189           | 188         | 195         | 191           | 176           | 172         | 178         | 199         | 203         | 96           |
| Czech Republic                           | 87          | 75            | 81          | 80          | 78            | 71            | 71          | 62          | 73          | 74          | 32           |
| Croatia                                  | 120         | 108           | 103         | 113         | 120           | 107           | 116         | 120         | 128         | 124         | 47           |
| Slovakia                                 | 46          | 38            | 41          | 42          | 50            | 43            | 45          | 45          | 47          | 61          | 29           |
| Ukraine                                  | 83          | 77            | 96          | 95          | 66            | 51            | 47          | 57          | 69          | 82          | 27           |
| Italy                                    | -           | -             | -           | -           | -             | 27            | 71          | 90          | 91          | 87          | 45           |
| Glass Packaging                          | 630         | 577           | 591         | 608         | 587           | 548           | 592         | 622         | 681         | 705         | 318          |
| Specialty Glass (Switzerland)            | 13          | 13            | 13          | 13          | 13            | 9             | 9           | 9           | 10          | 10          | 6            |
| <b>Net Sales from Goods and Services</b> | <b>643</b>  | <b>589</b>    | <b>604</b>  | <b>621</b>  | <b>599</b>    | <b>557</b>    | <b>602</b>  | <b>632</b>  | <b>691</b>  | <b>715</b>  | <b>324</b>   |
| YoY Growth in %                          | -           | (8%)          | 3%          | 3%          | (3%)          | (7%)          | 8%          | 5%          | 9%          | 4%          | (10%)        |
| Material and energy sales                | 3           | 4             | 4           | 3           | 2             | 2             | 3           | 3           | 3           | 4           |              |
| Ancillary services                       | 3           | 2             | 1           | 1           | 1             | 0             | 1           | 1           | 0           | 1           |              |
| Real estate management income            | 1           | 1             | 1           | 1           | 1             | 1             | 1           | 1           | 1           | 1           |              |
| Internally produced add. to PPE          | 0           | 1             | 4           | 3           | 1             | 0             | 1           | 2           | 0           | 2           |              |
| Supplier commissions                     | -           | -             | -           | 1           | 1             | 1             | 1           | 1           | 1           | 2           |              |
| Allocations disposal fees                | -           | -             | -           | 1           | 1             | 1             | 1           | 1           | 1           | 2           |              |
| Other income                             | 3           | 2             | 1           | 3           | 4             | 5             | 4           | 5           | 5           | 2           |              |
| <b>Other operating income</b>            | <b>10</b>   | <b>10</b>     | <b>12</b>   | <b>10</b>   | <b>10</b>     | <b>11</b>     | <b>12</b>   | <b>11</b>   | <b>12</b>   | <b>13</b>   | <b>6</b>     |
| YoY Growth in %                          |             | 6%            | 17%         | (16%)       | (4%)          | 10%           | 10%         | (10%)       | 13%         | 3%          | (10%)        |
| <b>Total Revenue</b>                     | <b>652</b>  | <b>600</b>    | <b>617</b>  | <b>631</b>  | <b>609</b>    | <b>568</b>    | <b>614</b>  | <b>642</b>  | <b>703</b>  | <b>728</b>  | <b>329</b>   |
| YoY Growth in %                          | -           | (8%)          | 3%          | 3%          | (4%)          | (7%)          | 8%          | 5%          | 9%          | 4%          | 14%          |
| <b>Organic vs. inorganic growth</b>      | <b>2010</b> | <b>2011</b>   | <b>2012</b> | <b>2013</b> | <b>2014</b>   | <b>2015</b>   | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> | <b>2020B</b> |
| Organic growth                           | -           | (8.%)         | 2.5%        | 2.7%        | (3.5%)        | (11.5%)       | 0.1%        | 2.0%        | 9.4%        | 4.6%        |              |
| Inorganic growth                         | -           | -             | -           | -           | -             | 4.5%          | 8.0%        | 3.0%        | 0.0%        | (1.1%)      |              |
| <b>Total Growth</b>                      | <b>-</b>    | <b>(8.3%)</b> | <b>2.5%</b> | <b>2.7%</b> | <b>(3.5%)</b> | <b>(7.1%)</b> | <b>8.0%</b> | <b>5.0%</b> | <b>9.4%</b> | <b>3.5%</b> |              |

## Highlights

- Comprehensive modernization as well as capacity expansions of the two-color glass furnaces in Slovakia and Ukraine led the foundation for strong topline growth in Eastern Europe
- Vetropack launched its operations in Trezzano sul Naviglio, Italy in 2015, first five months of operations generated CHF 26.8m
- As “Specialty Glass” Vetropack accounts revenues generated in the subsidiary Müller + Krempel Ltd. acquired in 1948 – the subsidiary trades products for the pharmaceutical industry, flasks and laboratory equipment
- The decline of 3% and 7% in FY14 and FY15 respectively is mainly attributable to economic instability in Ukraine, which impacts consumer activity negatively. Moreover rising imports of already in glass packed goods in Austria and Switzerland triggered further decrease in demand
- COVID-19 led to decrease of 10.4% in revenue in H1 2020 compared to H1 2019
- Other operating income developed stable over the 10-year observation period, no material changes
- The company achieved a revenue CAGR of 5.1% from FY15 to FY19
- As inorganic growth only the revenue generated in the Italian plant in Trezzano is counted in, previous investments such as the plant in Ukraine are considered as existing base

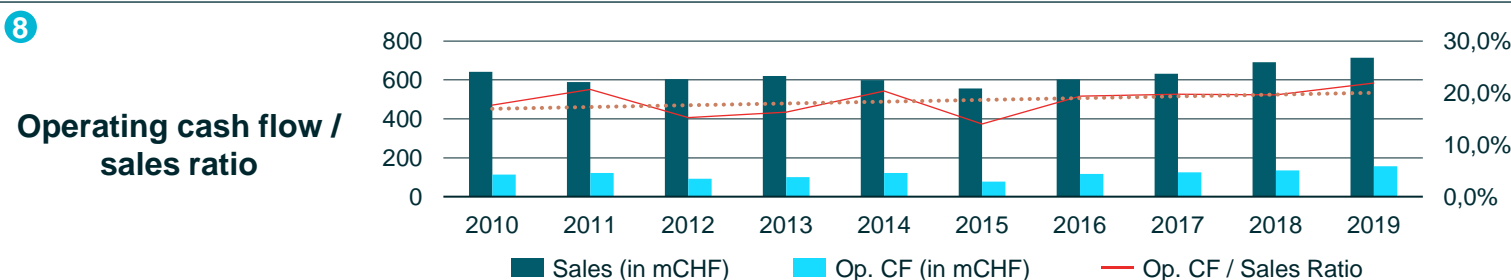
# Vetropack shows a track record of triple digit cash generation of its operations over the last 7 years, investments in machinery and further plants diminish the result slightly

## Cash flow statement analysis | Financials

| CHF millions                                | FY10        | FY11        | FY12        | FY13        | FY14        | FY15        | FY16        | FY17        | FY18         | FY19         | FY20B       |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|-------------|
| <b>Consolidated profit incl. minorities</b> | <b>40</b>   | <b>60</b>   | <b>85</b>   | <b>58</b>   | <b>47</b>   | <b>41</b>   | <b>43</b>   | <b>57</b>   | <b>60</b>    | <b>74</b>    | <b>46</b>   |
| Asset depreciation                          | 54          | 48          | 54          | 62          | 63          | 59          | 63          | 68          | 73           | 78           | 39          |
| Other changes in non-cash items             | 29          | 9           | (41)        | (9)         | (3)         | 3           | (1)         | 1           | 2            | 2            | (10)        |
| <b>Operating cash flow excl. Δ in NWC</b>   | <b>123</b>  | <b>117</b>  | <b>98</b>   | <b>110</b>  | <b>107</b>  | <b>104</b>  | <b>105</b>  | <b>126</b>  | <b>136</b>   | <b>153</b>   | <b>76</b>   |
| Δ in NWC                                    | (9)         | 5           | (6)         | (9)         | 15          | (26)        | 12          | (2)         | (0)          | 4            | 28          |
| <b>Operating cash flow incl. Δ in NWC</b>   | <b>113</b>  | <b>122</b>  | <b>92</b>   | <b>101</b>  | <b>122</b>  | <b>78</b>   | <b>117</b>  | <b>125</b>  | <b>136</b>   | <b>157</b>   | <b>48</b>   |
| Investments in tangible assets              | (47)        | (69)        | (101)       | (51)        | (72)        | (64)        | (81)        | (66)        | (114)        | (121)        | (35)        |
| Outflow for company acquisitions            | -           | -           | -           | (4)         | -           | (31)        | -           | -           | -            | -            | -           |
| Investments in intangible assets            | (5)         | (16)        | (12)        | (6)         | (2)         | (1)         | (3)         | (2)         | (1)          | (3)          | (1)         |
| Other from investment activities            | 1           | 0           | 45          | 4           | 3           | 2           | (12)        | 3           | 9            | (5)          | (15)        |
| <b>Cash flow from investment activities</b> | <b>(52)</b> | <b>(85)</b> | <b>(67)</b> | <b>(56)</b> | <b>(71)</b> | <b>(94)</b> | <b>(96)</b> | <b>(65)</b> | <b>(107)</b> | <b>(129)</b> | <b>(19)</b> |
| Dividend distribution to shareholders       | (15)        | (19)        | (14)        | (14)        | (15)        | (15)        | (15)        | (15)        | (18)         | (20)         | (26)        |
| Repayment of short-term fin. Debt           | (9)         | 19          | (45)        | (10)        | -           | 20          | (20)        | (0)         | (12)         | (45)         | -           |
| Repayment of long-term fin. Debt            | (27)        | (3)         | (20)        | 4           | 3           | (4)         | 44          | (2)         | -            | 5            | -           |
| Other from financing activities             | (8)         | (9)         | 0           | (31)        | 0           | 0           | 0           | 0           | (0)          | 0            | -           |
| <b>Cash Flow from financing activities</b>  | <b>(59)</b> | <b>(11)</b> | <b>(79)</b> | <b>(51)</b> | <b>(12)</b> | <b>0</b>    | <b>9</b>    | <b>(18)</b> | <b>(30)</b>  | <b>(60)</b>  | <b>(26)</b> |
| ForEx Differentials                         | (17)        | (3)         | (1)         | (0)         | (6)         | (8)         | (1)         | 2           | (1)          | 1            | (1)         |
| <b>Change in liquid funds</b>               | <b>(14)</b> | <b>23</b>   | <b>(55)</b> | <b>(6)</b>  | <b>33</b>   | <b>(24)</b> | <b>28</b>   | <b>44</b>   | <b>(2)</b>   | <b>(31)</b>  | <b>2</b>    |

## Highlights

- Depreciation of tangible assets is increasing on a continuous basis, replicating the underlying trend of growing investments into new machinery and capital-intensive furnaces
- Operating cashflow improvement of 12.8% compared to prior year attributable to increased demand and improvement in efficiencies.
- Increase of investments from FY17 to FY18 of c. 75%  
2018: Extensive modernization in Slovakia & Austria and new glass blowing machines in Ukraine  
2019: Two new furnaces in Slovakia and restoring of Ukraine
- Acquisition of glassworks in Trezzano sul Naviglio in Italy to strengthen position in domestic market
- Cash flow from investment activities is above average in FY18 and FY19 due to the modernizations and restoring in Eastern European glass works
- Dividend payout for shareholders improved by 30%, compared to FY18 (gross payout per share of 13.0 CHF)
- Significant increase attributed to the payback of a short-term bank loan with an interest rate of 0.7% and run rate until June 2019
- The trendline of the ratio shows that Vetropack manages to increase cash generation year-over-year relative to the respective revenues

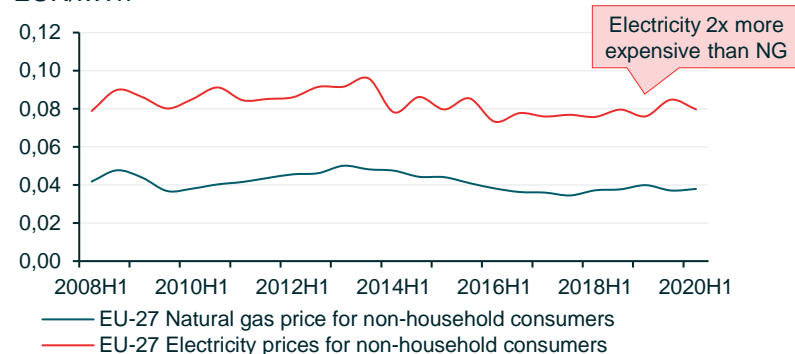


# Natural gas and electricity are the main energy sources for the glass manufacturing industry – raw materials show different dynamics with cullet being a local product

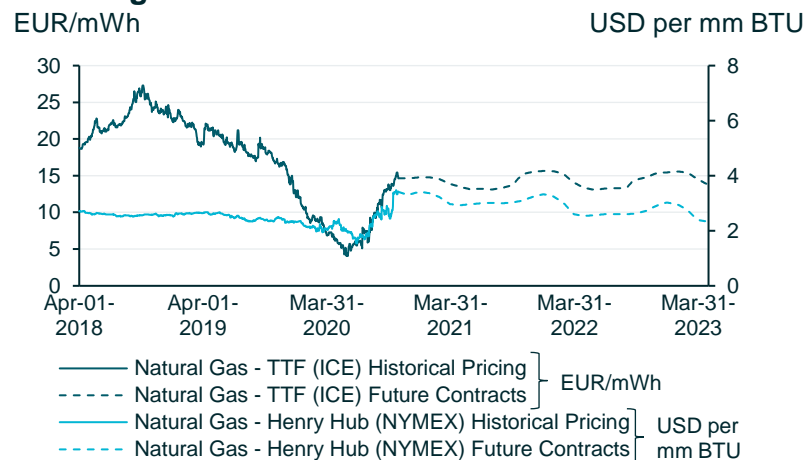
## Energy and raw material costs

### Input cost development

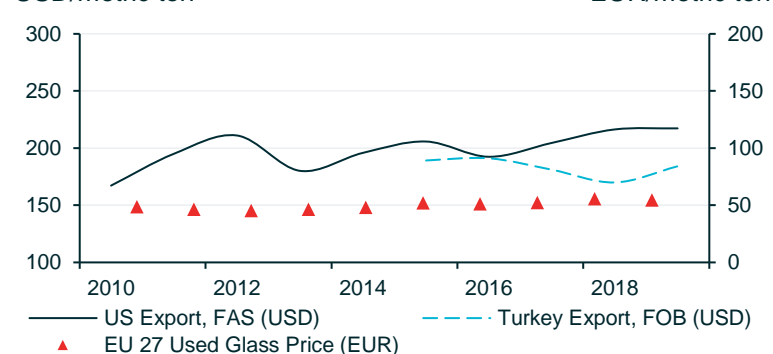
**Historical EU-27 natural gas and electricity price average (non-household consumers), 2008 to 2020**  
EUR/kWh



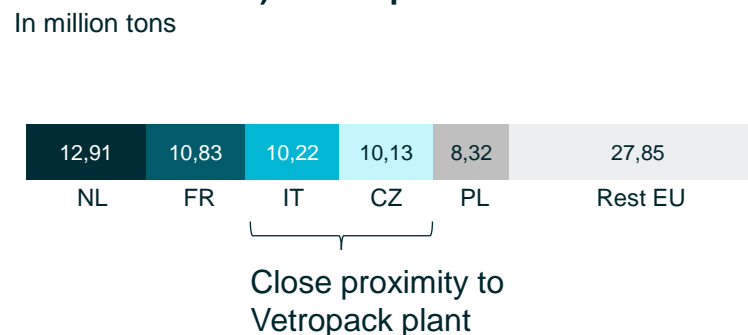
**Historical pricing and future contracts of traded natural gas**



**Historical soda ash price and EU-27 used glass (cullet) price average**  
USD/metric ton      EUR/metric ton



**Main producers of silica sands (quartz and industrial sands) in Europe**

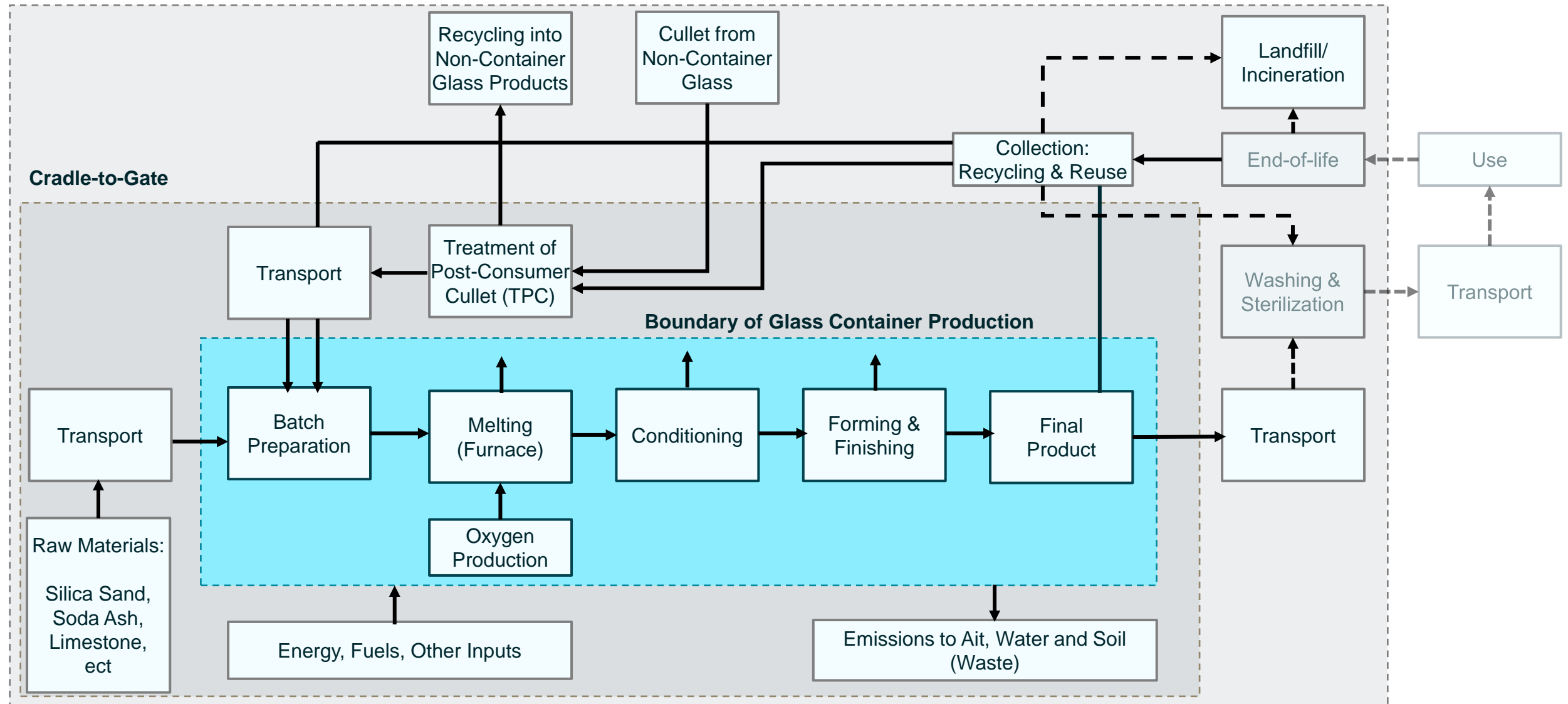


### Comments

- Major cost components energy costs and soda ash are traded and have general market prices (regional and global)
- It is common practice to hedge and enter fixed cost supply contracts with a duration ranging from 6 month to one year for these publicly traded components
- Other input materials show regional differences where prices are negotiated locally
- Average (EU-27) cullet prices remained stable over the last 5 years, ranging from EUR 52 to 54 per metric ton, however, local cullet prices vary due to regulatory and financial disparities governing the collection and recycling and the distance between supply centers and sites
- Majority of soda ash for European market supplied by US- and Turkey-based companies
- Soda ash prices show more volatility than cullet prices, however, soda ash only comprises 15% of raw material mix for glass (7% when 55% cullet is used)
- Majority of silica sand is traded on the open market, only minor amounts are traded on annual contracts
- Silica sand is not monitored, prices per metric ton vary between EUR 30 to 200 depending on purity and region

## Detailed external value chain and packaging life cycle illustration

### Deep dive: external value chain





# The Covid-19 pandemic has had a large financial impact on the private equity industry, which is largely reflected on the necessity to adapt current business models

## The impact of Covid-19 in Private Equity

The Private Equity industry has seen the last few years as being years of overall success and abundance. These successful years followed the global economic recession of 08, which deeply impacted PE funds and portfolio companies. However, unlike previous recessions, the pandemic will have many long-term effects on the way companies conduct business, business models and operations. This is applicable to any company, which includes PE funds, and their portfolio companies.

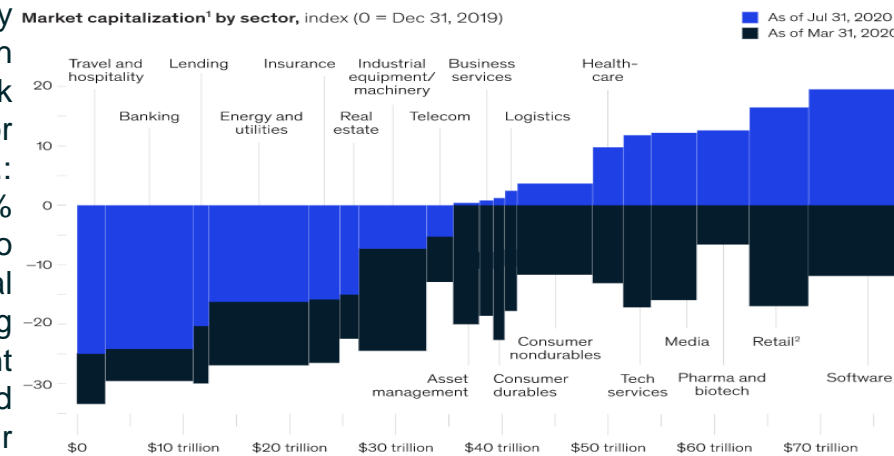
As for PE Funds, we are seeing managers taking different positions, which range from focussing on growth and cost cuts, to slowing down businesses with enough cash reserves to survive. On the other hand, portfolio companies may see changes in their business models through the acceleration of existing trends such as digitalization of customer channels and workflows and zero-touch operational models. There may also be a need for certain businesses and industries to adapt their models to shifts in customer preferences.

The impact that the Covid-19 pandemic has had on the Private Equity industry as a whole can also be clearly seen and measured. Looking at the market capitalization of PE funds, as of the start of the pandemic the industry counted with \$5.7 trillion Assets Under Management. As of the end of July, this value had seen an overall drop of 4% across industries, up from the decrease of 20% during March, with the largest impact being seen in the Travel and Hospitality industry.

The drop in market capitalizations differs mostly between industries and between countries. Factors such as individual country lockdown policies, central bank responses, and interest rates are the main reason for variation between countries for a certain industry (e.g.: the banking sector has seen drops of 15%-30% depending on the country). Some sectors are also inherently more vulnerable than others, such as real estate, logistics, and industrial equipment. Considering that about 50% of the total assets under management comes from highly vulnerable sectors, managers need to tread with care in the years to come as to not incur large losses.

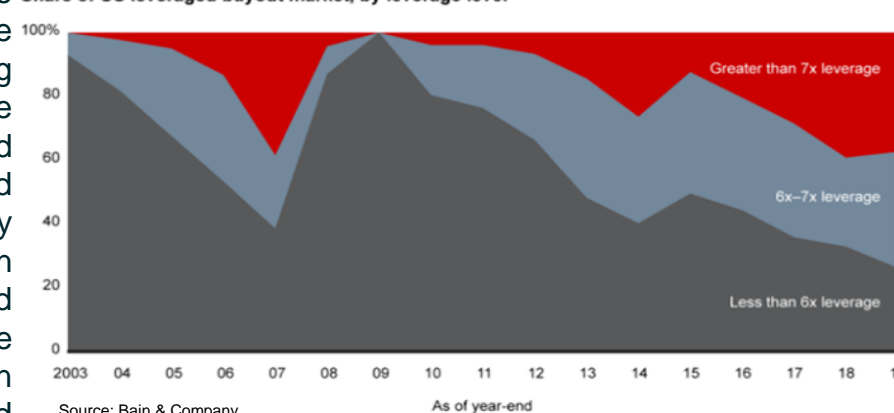
Another foreseeable change that is taking place due to the pandemic is regarding the valuation and leverage levels. Due to lower valuation multiples resulting from the pandemic, and as a consequence of the large levels of dry powder in possession of PE funds, fund managers may be tempted to fast-track new deals and increase their portfolios. One specific private equity strategy that will be seeing a rise is the focus on distressed investing, which has already showed significant increase in 2020 and is expected to be maintained. Leverage levels are expected to go down in the foreseeable future, reversing the recent trend, and following levels on par with the 08-09 global financial crisis levels.

Market capitalization<sup>1</sup> by sector, index (0 = Dec 31, 2019)



Source: McKinsey & Company

Share of US leveraged buyout market, by leverage level



Source: Bain & Company